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THE MEDICAL WORLD OF EARLY MODERN FRANCE

LAURENCE BROCKLISS
AND COLIN JONES

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Laurence Brockliss
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PREFACE

This book began as a conversation in the Queen's Lane Coffee House, Oxford, one cold February morning in 1984. Both of us felt that there was a desperate need for a study in English of early modern French medicine that would throw much needed comparative light on the ever-growing number of publications on the situation in England. But neither felt he had the expertise to give the subject the Braudelian treatment it required. The obvious solution was to pool our resources: our research interests were complementary and together we believed we could cover virtually all the areas that such an *histoire totale* would have to include. Initially, we hoped to write a relatively short study based on existing secondary material and our own research. It quickly became apparent, however, that many aspects of early modern French medicine had hardly begun to be studied, so that any attempt to produce an informative account from the current state of published research was doomed to failure. In consequence, we decided to abandon writing the book immediately and immerse ourselves for several years in the French libraries and archives. The present work, while always building on the work of others and our own research of the 1970s, is largely the result of our archival work over the past decade.

In the interim, the scale of the project has expanded enormously as we continually discovered new aspects of the medical world of early modern France that required our attention: hence the size of the present volume. Even now, though, we recognize that the book is not a definitive statement. Important areas of the study, we are only too well aware, are under-researched and our judgements thereon extremely speculative. This is particularly true of our account of the early modern French apothecary. Very much the neglected member of the company of French medical actors in the early modern period, we have once more placed him upon the medical stage, but his character is still not yet fully formed. Nevertheless, all historians must eventually put pen to paper: the temptation to continue to research to Doomsday is no longer an option in the age of the Research Assessment Exercise. We leave it to future medical historians to take our researches further. The present work has, we hope, a clear-cut interpretative line. It throws down the gauntlet for others to take up.

Writing a book together has been an extremely rewarding, if inevitably, a somewhat protracted affair. Tossing chapters and sections of chapters to and fro for mutual criticism has been an immensely valuable means of refining and tightening our arguments, but it has multiplied the number of drafts. Our essential *modus operandi* has been to divide the chapters between us, so that each has a single author, even if certain parts have been initially written by both. Readers

cognizant of our research interests will have no difficulty identifying the author of a particular chapter. Such readers, too, will be well aware that our writing styles are very different, the one rich, the other spare—doubtless a reflection of our respective Oxonian and Cantabrigian trainings. As much as possible we have tried to minimize the stylistic clash by giving each other *carte blanche* to subdue or enliven the more purple or duller passages in our respective texts. We hope that the result is that the book has a common stylistic tone in which our two voices are successfully merged.[1]

In the course of writing this work, we have, like all authors, encountered many debts that can never be successfully repaid. As the Introduction will make clear, we have visited a large number of archives and libraries in Paris and the French provinces over the years. Wherever we have gone, we have always been met with great courtesy and often enthusiasm. Not only have librarians and archivists, indeed even other readers, been quick to point us to manuscripts or books of which we were unaware, but several provincial librarians, realizing how pressurized we were for time, even allowed us to work out of hours to complete our research. Our first debt of gratitude, then, is owed to the countless librarians, archivists, and their assistants (not just in France but in Britain, Ireland, and the United States) without whose help this study could never have been completed. Especial thanks are due to Mme Dumaître and Mlle Molitor, the former director and the present archivist of the Bibliothèque de la Faculté de Médecine de Paris, and to the archivists and librarians of the Bibliothèque de la Faculté de Médecine de Montpellier and the Archives Départementales de l'Hérault. It was in their libraries and archives that we have spent most of our time researching into the history of early modern French medicine. This is a book that they have been expecting for ten years or more!

Secondly, we owe a great deal to the support of numerous historians in Britain, the United States, and France who have constantly encouraged our endeavour and given us the opportunity to present our initial findings to seminars and conferences. On the other side of the Atlantic, particular mention must be made of Caroline Hannaway, Toby Gelfand, Matthew Ramsey, Ann La Berge, and Dora Weiner—five other anglophone historians of French medicine whose own research, published and unpublished, on different aspects of the eighteenth and early nineteenth centuries has helped greatly in the crystallization of our own ideas. In France, we owe much to Olivier Faure and the late Roselyne Rey, with both of whom we have had many long and illuminating conversations about our work. Much is owed too to Dr Louis Dulieu for his guid-

[1] Laurence Brockliss was primarily responsible for the writing of Chapters 2, 3, and 5, 6 (Sect. C), 7, 8, and 9; Colin Jones for the writing of Chapters 1, 4, 6, 10, 11, and 12. The Introduction and Conclusion were, more than most, cooperative affairs.

ance around the archives of the Montpellier medical faculty, which he knows and loves so well. In this country, we are greatly indebted to Roy Porter, Bill Bynum, and Andrew Wear of the Wellcome Institute for the History of Medicine for their continual interest in our project. Our colleagues at the universities of Oxford and Exeter also deserve thanks. The History Department at Stanford University, and the Bay Area French History Group, provided a stimulating environment for writing a second draft while Colin Jones was Kratter Visiting Professor of European History at Stanford in 1993–4. A special debt of thanks is due to Jonathan Barry, who kindly read and commented on a large part of our manuscript. Colin Jones would also like to thank Josephine McDonaugh for her help during the writing of this book. We would both like to thank Jenny Hosking for help with the Bibliography. Sean Goddard drew the maps and figures.

Thirdly, we must thank the Wolfson Foundation, the British Academy, the Nuffield Foundation, the Universities of Exeter, Hull and Oxford, and Magdalen College Oxford for helping to fund countless research trips abroad over the last twenty years and providing generous periods of research leave. Colin Jones was awarded a Wellcome Trust Research Leave Award in 1992–3. As we grow older our research time is being more and more eroded by increasing teaching and administrative duties, and without periodic bouts of sabbatical leave this book could not have been finished. Finally, we must also thank Tony Morris of Oxford University Press. When he commissioned this work it was intended to be less than half its present size. He has watched a minnow turn into Leviathan with surprising equanimity. We hope that the trust that he and so many others have placed in our gargantuan enterprise has not been misplaced.

L.B.
C.J.

Warwick and Oxford

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List of Abbreviations

AD	Archives départementales
AFMM	Archives de la faculté de médecine de Montpellier
AM	Archives municipales
AN	Archives Nationales, Paris
Annales ESC	*Annales, économies, sociétés, civilisations*
ASRM	Archives de la Société Royale de Médecine, Paris
BFMM	Bibliothèque de la faculté de médecine de Montpellier
BFMP	Bibliothèque de la faculté de médecine de Paris
BL	British Library, London
BM	Bibliothèque municipale
BN	Bibliothèque Nationale, Paris
Isambert	Jourdan, Decrusy, and Isambert, *Recueil général des anciennes lois françaises* (28 vols.; Paris, 1821–33)
MS Fr	Manuscrits français
TMP	*Theses medicae Parisiensis*, 9 vols. in folio and 16 vols. in quarto

Biographical Note

The first time the name of a medical practitioner is cited in the text, his or her Christian name and dates are given if known. Unless otherwise stated, this and other biographical data is drawn from the following sources: *Dictionary of National Biography* (22 vols.; London, 1908–9); *Dictionary of Scientific Biography* (15 vols.; New York, 1970–8); *Dictionnaire de biographie française* (18 vols. to date; Paris, 1929–); *Dizionario biografico degli italiani* (44 vols. to date; Rome, 1960–); L. G. Michaud (ed.), *Biographie universelle, ancienne et moderne* (2nd edn., 45 vols.; Paris, 1843); *Archives de biographie française*: biographical dictionary on 1,065 microfiches, created from the reproduction of 180 French regional, local and professional reference works, originally published 1647–1986, together with printed index: *Index biographique française*, ed. H. and B. Dwyer (4 vols.; London, 1993); E. and E. Haag, *La France protestante, ou Vie des Protestants français* (9 vols.; Paris, 1846–59); the biographical appendices to L. Dulieu, *La Médecine à Montpellier*, ii. *La Renaissance* (Avignon, 1979); id., *La Médecine à Montpellier*, iii. *L'Époque classique* (2 pts. in 2 vols.; Avignon, 1983–6), pt. 2; id., *La Chirurgie à Montpellier de ses origines au début du XIXe siècle* (Avignon, 1975); id., *La Pharmacie à Montpellier de ses origines à nos jours* (Avignon, 1973); N. F. J. Eloy, *Dictionnaire historique de la médecine* (4 vols.; Mons, 1778); J. Devaux, *Index funereus chirurgorum Parisiensum*, printed in François Quesnay, *Recherches critiques et historiques sur l'origine, sur les divers états et sur le progrès de la chirurgie en France* (Paris, 1744).

A Note on Presentation

QUOTATIONS

All quotations in the text are given in English; the translations from the original French or Latin are the authors' own, unless otherwise stated.

CITATION OF TEXTS

Primary and secondary sources cited for the first time in a chapter are given in full, even if the source has been referred to in an earlier chapter. The citation of pre-1800 French texts follows the original orthography except that accents have been added according to modern usage. On first citing, the authors of primary sources are referred to by Christian name and surname, wherever possible. Authors of secondary sources are only referred to by initial(s) and surname. Where no author is cited, the work is anonymous.

CITATION OF INSTITUTIONS

Wherever possible, the titles of French institutions have been Anglicized: thus, the Royal Society of Medicine, not the Société Royale de Médecine. In general, the upper case has been used for single institutions, the lower case for institutional categories; where the French title has been retained, only institutional categories have been italicized: thus, the Jardin du Roi and the Parlement of Paris, but the *parlements* and the *écoles de chirurgie.*

A Note on Exchange Rates

In the early sixteenth century the pound sterling was worth 8 *livres tournois*; in the eighteenth century the pound was worth 25 *livres tournois*.

INTRODUCTION

TOWARDS A NEW MEDICAL HISTORY OF EARLY MODERN FRANCE

A. The 'New Medical History'

Since the 1960s the character of medical history has been utterly transformed. A great deal of work in this area prior to that decade was 'insider' history of medicine, often conducted by amateur scholars, including many ex-doctors, eager to plot the story of the 'triumph of Western medicine over disease' in ways which at times came uncomfortably close to an exercise in retrospective professional self-justification. Underlying their accounts was a grand narrative with a well-established chronological caesura around 1800. In the first period, which ran from the ancient Greeks to the eve of the Industrial Revolution, the fundamental principles of medicine were drawn from the second-century physician Galen, and their dominant mode of expression was dogmatic and rationalist rather than empirical and scientific. Though some great doctors were alleged to have practised, in general it was held that recourse to medical advice was as likely to have harmed as to have helped the cure of a disease. After *c.* 1800, in contrast, medicine was deemed to have gradually become an independent science, whose principles were no longer drawn from the sacred texts of antiquity, but derived from careful empirical research based in the laboratory and the hospital clinic. 'Hospital medicine' took over from 'library medicine', as pawing corpses replaced poring over canonical texts as 'what doctors did'. Consequently, medical practitioners eventually acquired the ability not only to understand disease but actually to effect its cure. The conditions were thereby established for the formation of the modern medical profession with its legitimate claims to a monopoly of health care. Unsurprisingly, insider historians of medicine found the second period the more interesting and congenial; those who studied the earlier period were often classicists or else antiquarians searching for portents and precursors among the writings of supposedly avant-garde figures as Vesalius or Harvey.[1]

[1] e.g. G. Whitteridge, *William Harvey and the Circulation of the Blood* (London, 1971); C. D. O'Malley, *Andreas Vesalius of Brussels, 1514–1564* (Berkeley & Los Angeles, 1964). Browsing in the pages of a journal such as *Medical History* in the late 1950s (or in the French journal *Histoire des sciences médicales* in the 1990s) provides a redolent flavour of the approach we are describing.

Though even today some insiders continue to tell the insider's story, medical history has been effectively colonized by professional historians, who have fashioned what is in essence a 'new medical history'.[2] There are both intellectual and institutional reasons behind the emergence of this new version of medical history. By the 1960s and 1970s the work of sociologists and philosophers of science was opening up new perspectives on the history of medical practice, especially in Anglo-American scholarship. These 'outsiders' tended to accept the division of the field into its two distinctive periods, but they were far less ready to attribute the 'rise of the medical profession' to the emergence of an empirically oriented and increasingly efficacious medical science. Sociologists argued that professionalization was a major facet of modernization processes evident in all advanced societies—modernization theory was much *à la mode*[3]—but went on to show the ways in which certain groups of medical practitioners utilized the rhetoric of science to gain a legal monopoly, long before they could hope to cure disease.[4] The freebooting attacks of an Ivan Illich on the medical profession in general had a similarly subversive effect on time-worn pieties.[5] Philosophers of science—prominent amongst whom was Michel Foucault—were also begin-

We should stress that, where its teleological and 'insiderist' assumptions can be placed in parentheses, such studies retain a good deal of utility for contemporary scholars. Indeed, as we make clear below, we much admire the erudition often displayed in such work, and draw heavily on scholars working within this paradigm.

[2] For this phrase, and a discussion of it in respect to French historiography, see C. Jones, ' "New Medical History" in France: The View from Britain', *French Historian*, 2 (1987), 3–14. For useful depictions of the transformation of the discipline, see C. Webster, 'The Historiography of Medicine' (including, p. 39, a discussion of an earlier use of the term 'new medical history') and L. J. Jordanova, 'The Social Sciences and the History of Science and Medicine', both in P. Corsi and P. Weindling (eds.), *Information Sources in the History of Science and Medicine* (London, 1983); P. Wright and A. Treacher (eds.), *The Problem of Medical Knowledge* (Edinburgh, 1982); J. Woodward and D. Richards, 'Towards a Social History of Medicine', in eid. (eds.), *Health Care and Popular Medicine in Nineteenth-Century England* (London, 1977); R. S. Porter and A. Wear, 'Introduction', in eid. (eds.), *Problems and Methods in the History of Medicine* (London, 1987); and L. J. Jordanova, 'Has the Social History of Medicine Come of Age?' *Historical Journal*, 26 (1993), 437–49. The story could also be convincingly told through an analysis of the membership of the Society for the Social History of Medicine, founded in 1969, and through the contents of its journal, first the *Bulletin of the Society for the Social History of Medicine* and from 1989 the *Social History of Medicine*. See too the range of goods on offer in W. F. Bynum and R. Porter (eds.), *Companion Encyclopaedia of the History of Medicine* (2 vols.; London, 1994).

[3] For a critique of modernization theory in the context of the history of medicine and science, see Jordanova, 'Social Sciences and the History of Science', 91 f.

[4] An early analysis of medical professionalization is W. J. Goode, 'Encroachment, Charlatanism, and the Emerging Profession: Psychology, Sociology and Medicine', *American Sociological Review*, 25 (1960), 902–14; but see esp. E. Friedson, *Profession of Medicine: A Study of the Sociology of Applied Knowledge* (New York, 1970). For general studies, see too G. Millerson, *The Qualifying Association: A Study of Professionalization* (London, 1964); T. J. Johnson, *Professions and Power* (New York, 1967); and M. S. Larson, *The Rise of Professionalism: A Sociological Analysis* (Berkeley & Los Angeles, 1977).

[5] I. Illich, *Limits to Medicine* (London, 1963).

ning to demonstrate that modern medicine, however putatively scientific and efficacious, retained an ideological status predicated upon a peculiar way of 'looking' at the body: Foucault's investigation ('archaeology') of the moment in the late eighteenth century when the 'clinical gaze' originated stressed the confluence of structures of power as well as knowledge which, he argued, still invested scientific medicine.[6] These intellectual attacks seriously undermined the modern medical profession's claim to be particularly altruistic, public-spirited, and beyond critique. They also had the effect of allowing scholars to glimpse how much more interesting and less monolithic the history of medicine prior to 1800 was, once it had been freed from the progressivism and teleology of the old grand narrative and placed on the broader canvas of social development. Even when viewed from the narrowest of 'internalist' perspectives, the history of Europe from the ancient Greeks to the Industrial Revolution could scarcely be seen as marking a 2,000-year period of stasis.

At much the same time, changes in the practice of social history were also transforming the way new historians coming to the field perceived medical history. In Anglophone countries, the call for 'history from below' plus research centring on popular culture both demonstrated the irrelevance of most of the activity of most trained medical practitioners for most of the population and for most of the time prior to 1850 at least. They concomitantly highlighted historians' ignorance of most informal methods of health care—a realization which swiftly spawned an impressive literature.[7]

As a result, the scope of the subject greatly extended beyond the 'insiderist' limits of 'what doctors did'. The content of medical ideas now seemed a totally inadequate guide to change in the history of medicine—proudly 'externalist' historians scoffed at the limitations of such 'internalist' analysis. Attention now

[6] M. Foucault, *Naissance de la clinique* (Paris, 1963),—Eng. trans., *The Birth of the Clinic: An Archaeology of Medical Perception* (London, 1973)—had been preceded by Foucault's pathbreaking analysis of the origins of psychiatry, *Folie et déraison: Histoire de la folie à l'âge classique* (Paris, 1961) (not available in English in unabridged form). In his other works, notably *Les Mots et les choses: Une archéologie des sciences humaines* (Paris, 1966),—Eng. trans., *The Archaeology of Knowledge* (London, 1990)—Foucault placed the revolution in medical ideology, which he identified as occurring *c.*1800 in the wider context of the 'epistemic' shift from the classical to the romantic age. Foucault's work draws heavily on earlier French philosophers of science, notably his doctoral supervisor Georges Canguilhem. For this context, see C. Jones and R. S. Porter (eds.), 'Introduction' in eid., *Reassessing Foucault: Power, Medicine and the Body* (London, 1994), 7.

[7] For an overview of the developing field, see J. Sharpe, 'History from Below', in P. Burke (ed.), *New Perspectives on Historical Writing* (Cambridge, 1991); and, from the medical angle, A. Wear, 'Interfaces: Perceptions of Health and Illness in Early Modern England', in id. and Porter, *Problems and Methods in the History of Medicine*; R. S. Porter, 'The Patient's View: Doing History from Below', *Theory and Society*, 14 (1985), 175–98; and the essays in id. (ed.), *Patients and Practitioners: Lay Perceptions of Medicine in Pre-Industrial England* (Cambridge, 1985).

focused not simply on the organization and ideology of trained medical practitioners. More urgently requiring analysis were all those individuals who, whether legal or illegal, male or female, trained or untrained, in some way offered services relating to health. The revival of women's history and the burgeoning history of gender were also important in this respect, and highlighted any number of neglected areas in medical aspects of women's history.[8] Medical history came to be as much about the midwife, the nursing sister, and the village healer (all categories largely disparaged or ignored by insiderists) as about groups of physicians or surgeons. Furthermore, again under the influence of sociologists, historians began to investigate disease from the point of view of the sufferer—often (following Jewson) dividing at around 1800 periods of first patient-led medicine (in which the patient dictated the nature of sickness) and subsequently practitioner-led medicine (in which diagnosis was in a scientific language largely inaccessible to the patient).[9] A further formative influence from the mid-1980s was the 'new cultural history' emerging in the United States, which set the history of ideas in a broader cultural context than formerly and, under the influence of Foucault as well as of literary scholars, opened it up to theoretical approaches.[10]

The synthesis of social and demographic approaches achieved by French historians working under the influence of the *Annales* tradition was also important. The systematic use of family reconstitution techniques through the exploitation of births, marriages, and deaths registers opened up historians to the material realities of the life of the majority of the population, and allowed them to glimpse something of a biological *longue durée* beyond the secular temporalities of economics and the environment.[11] Hopes that there might be a medical

[8] e.g. Y. Knibiehler and C. Fouquet, *La Femme et les médecins* (Paris, 1983); E. Shorter, *A History of Women's Bodies* (London, 1983); B. Ehrenreich and D. English, *For Her Own Good: 150 Years of Experts' Advice to Women* (New York, 1978); and a whole host of writings on childbirth and midwifery, sampled in the works cited below, n. 37. By far the most sophisticated analysis of women and medicine in the period we are covering is B. Duden, *The Woman beneath the Skin: A Doctor's Patients in Eighteenth-Century Germany*, Eng. trans. (Cambridge, Mass., 1991). Excellent too for its broader perspectives is L. J. Jordanova, *Sexual Visions: Images of Gender in Science and Medicine between the Eighteenth and Twentieth Centuries* (London, 1989).

[9] See esp. N. Jewson, 'The Disappearance of the Sick Man from Medical Cosmology, 1770–1870', *Sociology*, 10 (1976), 225–44. Cf. Porter (ed.), *Patients and Practitioners*; and, esp. for the early modern period, L. M. Beier, *Sufferers and Healers: The Experience of Illness in Seventeenth-Century England* (London, 1987).

[10] L. Hunt (ed.), *The New Cultural History* (Berkeley & Los Angeles, 1989) is a helpful introd. here.

[11] For the *Annales*, see R. Forster, 'Achievements of the Annales School', *Journal of Economic History*, 38 (1978), 58–76; J. Revel, 'Histoire et sciences sociales: Les Paradigmes des Annales', *Annales ESC* 34 (1979), 1360–76; and F. Furet, 'Beyond the Annales', *Journal of Modern History*, 55 (1983), 389–410. And for Braudel and the *longue durée*, see F. Braudel, *Écrits sur l'histoire* (Paris, 1969). In England, the new science of historical demography was never so thoroughly

dimension to master-*Annaliste* Fernand Braudel's idea of *l'histoire totale* in the event proved unfounded. Medical history in the *Annales* has remained largely an incidental and marginal area of publication: valuable work on the mapping of epidemics, plague, the history of childbirth, and the distribution of medical personnel has failed to shift the *Annaliste* historian's agenda in a medical-historical direction.[12] The only attempt to produce a general account of medicine under the Ancien Régime—François Lebrun's *Médecins, saints et sorciers* (1983)[13]—is excellent on demographic history and on popular *mentalités*, but scarcely begins to address the flow of medical ideas or the issues of health and disease as socio-cultural constructs. Significantly too, the work of Foucault drew telling critiques from the *Annaliste* camp, and in general terms elicited a less powerful and positive response from most French historians than it did on many American campuses.[14]

The institutional context in which the history of medicine has been conducted has been a further determinant of scholarly production. In France, despite spasmodic support for the topic, the history of medicine has never been able to penetrate the institutional carapace of the academy, nor to establish itself as an independent and intellectually esteemed discipline or even subspecialism. In the USA, the subject had an early autonomy and identity, while the financial support for its study in British universities afforded through the generosity of Sir Henry Wellcome and concretized in the work of the Wellcome Trust meant that the discipline boomed even in the midst of the extremely severe financial situation facing institutions of higher education in the 1980s and early 1990s. While many other historical specialisms—African and American history, for example—were decimated, an ever-expanding number of multifaceted articles and monographs on medical history poured forth from British campuses.[15]

integrated into social historians' approaches, and became centred on the work of the Cambridge Group for the History of Population and Social Structure. See esp. R. Schofield and A. Wrigley, *The Population History of England: 1541–1871* (London, 1981).

[12] For an anglophone introduction to this work, see *Selections from the Annales*, ed. R. Forster and O. Ranum, esp. i. *Biology of Man in History* (Baltimore, 1975) and ii. *Medicine and Society in France* (Baltimore, 1980). For a critique of medical *Annalisme*, see T. Gelfand, 'The *Annales* and Medical Historiography: *Bilans* and *perspectives*', in Porter and Wear (eds.), *Problems and Methods in the History of Medicine*. For plague, see J. N. Biraben, *Les Hommes et la peste en France et dans les pays européens et méditerranéens* (2 vols.; Paris, 1975–6).

[13] *Se Soigner autrefois. Médecins, saints et sorciers aux XVIIe et XVIIIe siècles* (Paris, 1983). Lebrun is also the author of *Les Hommes et la mort en Anjou au XVIIe et XVIIIe siècles: Essai de démographie et de psychologie historiques* (Paris, 1971), a superb ex. of French regional historiography at its best, and characterized, typically, by important sections on mortality, medical personnel, and to some degree morbidity.

[14] See esp. J. Léonard, 'L'Historien et le philosophe: A propos de *Surveiller et Punir: Naissance de la prison*', in M. Perrot (ed.), *L'Impossible Prison: Recherches sur le système pénitentiaire au XIXe siècle* (Paris, 1980).

[15] The underdevelopment of the subject in France comes out extraordinarily powerfully in

The output of this wave of scholarship set a new research agenda for historians of medicine. Very noticeably, however, the overwhelming majority of this material, for the early modern period in particular, was on British medicine—and on English medicine in particular. This is not the place to discuss that literature in detail, nor to expatiate on the particular contribution to this historiography of the phenomenon that is Roy Porter.[16] Suffice it to say that, from a Continental perspective, the fecundity and brilliance of research on England has helped both to enlighten but also to obscure our understanding of early modern medicine *tout court*. The English case has frequently been taken as representative of European developments despite the fact that many of English society's most impressive features—its precocious institutional homogeneity, lightness of corporative constraints, economic dynamism, and representative political system—were only partially or distortedly reproduced on the Continent. There is, in sum, a need for an account of a non-English medical system which is not taken to be a replication of the English model—yet which is as richly textured, as archivally based, and as comprehensive in its objectives as the best of the 'new medical history' devoted to the English case.

In the present volume, we are endeavouring to write a more complete and comprehensive account of medical institutions and practitioners in early modern France than any attempted hitherto—and one which is indebted to both the history of ideas and the 'new cultural history'; which covers an extremely long span of time; which takes into its purview all the variegated types of medical practitioner, from the most learned to the most unlettered; and which attempts more rigorously than its predecessors to contextualize the medical world socially, demographically, economically, intellectually, and culturally. Our own varied research interests have ranged around a good many facets of the topic for more than two decades now, in work based in dozens of Parisian and provincial (and

the tributes to the late Jacques Léonard (with François Lebrun, probably the greatest recent historian of medicine in France) in M. Lagrée and F. Lebrun (eds.), *Pour l'Histoire de la médecine: Autour de l'œuvre de Jacques Léonard* (Paris, 1994) (see esp. the comments of J. P. Peter and A. Corbin). Léonard's work focused on the 19th cent. And for the USA, see E. H. Beardsley, 'The History of American Science and Medicine', in Corsi and Weindling (eds.), *Information Sources*.

[16] See R. S. Porter's *Health for Sale: Quackery in England, 1660–1850* (Manchester, 1989), and his accounts of psychiatry in *Mind-Forg'd Manacles: A History of Madness in England from the Restoration to the Regency* (London, 1987) and *A Social History of Madness: Stories of the Insane* (London, 1985). Porter is also co-author, with Dorothy Porter, of *Patient's Progress: Doctors and Doctoring in Eighteenth-Century England* (Oxford, 1989) and *In Sickness and in Health: The British Experience, 1650–1850* (London, 1988). He is also editor and co-editor of important collections of essays, including *Patients and Practitioners*; (with A. Wear), *Problems and Methods in the History of Medicine*; *The Popularization of Medicine, 1650–1850* (London, 1992); (with L. Granshaw), *The Hospital in History* (London, 1989); (with W. F. Bynum) *Medical Fringe and Medical Orthodoxy, 1750–1850* (London, 1987), and *Living and Dying in London* (London, 1991); and (with M. Mulvey Roberts) *Literature and Medicine during the Eighteenth Century* (London, 1993). This, moreover, forms only a fraction of Porter's total *œuvre*.

some foreign) libraries and archives. Combined together, this has given us an archival foundation on which to build this account of the medical world of early modern France which is unusually broad, unusually deep, and unusually rich.

We will still perhaps be more aware than many readers of the deficiencies and shortcomings of our account. We are acutely conscious too—even in a volume of some 900 pages and 3,000 footnotes, which makes reference to the life or works of some 720 medical practitioners, physicians, surgeons, apothecaries, and many others, ranging from humble local healers to court physicians, from Nostradamus to Bichat, from Ambroise Paré to Larrey, from Louise Bourgeois to Madame du Coudray—of how much there still remains to be done. This is, then, both a personal statement on our part and, inevitably, an interim one. The thoroughness of our researches in Paris and Montpellier have at least the advantage of being focused on cities which contained the two most important medical faculties in early modern France—but this has meant that we are travelling fairly light in a good number of other locations.[17] Cities with a medical history as various and as interesting as, say, Lyons, Bordeaux, Marseilles, Perpignan, and Strasburg appear in our pages far more fleetingly than we might have hoped. It is also true that a number of topics which fall within the remit of our subject continue, best efforts notwithstanding, to be shrouded in darkness. Perhaps the most striking case here is the history of apothecaries and pharmacy—a subject crying out for more attention. We are also aware of sadly not living up to the promise of recent work in the history of insanity and psychiatry. Though we offer what we believe will be seen as innovatory perspectives in a good number of areas—medical commercialism and military medicine, for example—here again we have a sense that our approaches touch only the tips of some very considerable icebergs. Given the frank impossibility of grounding the whole territory we are covering in primary sources, we acknowledge too how freely we have drawn on secondary accounts—especially for the earlier phases, since the eighteenth century offers more generous archival riches. The secondary literature on which we draw includes the best of what we have characterized as insider history, as well as the countless insights, interpretative points, and material evidence we have derived from the epigones of the new medical history.

Yet if the resultant volume offers in some senses a new medical history of early modern France in its own right, it is one which effects a rupture with many of

[17] Between us, we have worked in municipal and departmental archives, municipal libraries, and private collections in the following locations: Aix-en-Provence, Avignon, Bordeaux, Bourges, Caen, Carcassonne, Carpentras, Clermont-Ferrand, Dijon, Embrun, Gap, Grenoble, Laon, Limoges, Lyons, Melun, Mende, Metz, Montpellier, Narbonne, Nîmes, Pau, Quimper, Reims, Rennes, Sète, and Toulouse. Important holdings in the Wellcome Institute for the History of Medicine and the British Library in London and the College of Physicians in Philadelphia have also been consulted *in extenso*.

the interpretative schemas currently in play—on both sides of the Channel. We seek to provide an account of an early modern medical system to place alongside the well-documented English example—and to measure, at least provisionally, convergences and divergences from the English paradigm. We place renewed emphasis on the need to encompass change in medical ideas alongside externalist factors.[18] We endeavour consistently to relate our findings to the historical mainstream of general history. And we utilize a relatively new set of terms and concepts to structure our findings. In what remains of this Introduction, we provide an overview of the core of our work, setting it—even if only in a necessarily sketchy fashion—in the context of the differing histories of the medical systems of other European states. In so doing, we will introduce some of the key concepts and vocabulary in which we will be framing our account.

B. The Unitary Medical World of Early Modern France

Our aim in the present volume is to explore the parameters of what we have called the 'medical world' of early modern France, a term by which we designate the whole set of practitioners of health services, trained and untrained, educated and non-educated, male and female, working in France between the sixteenth century and the French Revolution. In so far as self-medication was a frequent health option, the term encompasses some of the sick as well as their practitioners. Throughout the period under review, we will argue, the medical world was dominated legally and intellectually by the body of trained practitioners working within the corporative frameworks of early modern society. The 'corporative medical community', as we call it, which formed the core of the medical world, comprised a complex tripartite ensemble of physicians, surgeons, and apothecaries grouped into various legally recognized collectivities.[19]

In 1500 there had been few corporative or legal restrictions on the practice of medicine in the vast majority of the realm. Although trained medical practitioners could be largely distinguished from the 'untrained', there were few places outside Paris in which they were organized into autonomous corporate bodies enjoying a local legally endorsed monopoly of health care. It was to be the period from 1500 to 1650—especially the decades at the end of the sixteenth and those at the start of the seventeenth centuries—which saw medical practice in urban France become largely corporatized. In the largest towns, the practice of

[18] In this concern for the history of ideas as well as social history, we link up with the spirit of the (inevitably highly dated) work of Paul Delaunay, notably his *Le Monde médical parisien au XVIIIe siècle* (Paris, 1906) and *La Vie médicale aux XVIe, XVIIe et XVIIIe siècles* (Paris, 1935). With a few honourable exceptions, French historians working under the aegis of the *Annales* school have been strikingly lacking in interest in the history of ideas.

[19] We prefer this nomenclature to that of the 'profession' for reasons outlined below, pp.16–20, 31–3.

physic—as a university-trained art, this was situated at the apex of the corporative hierarchy—was legally limited to a local college of physicians, while in virtually every town over 2,000 inhabitants the more manual practice of surgery and pharmacy became the monopoly of incorporated communities of surgeons and apothecaries. At its height, the system comprised 40-odd colleges of physicians, roughly 300 surgeons' corps, and an indeterminate (though probably roughly similar) number of apothecaries' organizations.

There were two main reasons for this organizational development. First, trained practitioners—perhaps facing increased competititon from medical irregulars—began to lobby for it. Second (and probably more importantly), the crown encouraged it. With royal authority under persistent threat from aristocratic feuding, religious dissidence, and social disorder during and subsequent to the Wars of Religion (1562–98), the monarch and his servants sought to maintain a grip on France's *bonnes villes* by effectively buying the support of established professional and artisanal classes. This was achieved notably through the sale of office and the granting of monopoly rights, thereby confirming France's situation as a complex society of orders. In the long term, not only were the towns confirmed in their traditional royalist allegiance, but guilds and similar corporative bodies became agents of central government alongside the bureaucracy and municipal authorities—and a handy source of state finance to boot. The core of the medical world was skilfully sewn into the fabric of the early modern state.[20]

Under this system, the constituent parts of the medical community came to be grouped in a sensitive hierarchy of corporative bodies (medical colleges, surgeons' and apothecaries' guilds, etc.) which enjoyed collective rights and responsibilities endorsed by the crown and therefore upholdable in public law, over the teaching and practice of their different areas of expertise. In reality, admittedly, this division of corporative labour only existed even in law in those large towns where the three arts were permanently located.[21] Generally in small towns only surgeons and apothecaries were to be found, so they had perforce to double in the physicians' arts of diagnosis and prescription. Out in the villages, where trained medical personnel were relatively scarce, at least before the eighteenth century, anyone could legally practise the three parts of medicine.

[20] See Ch. 3, Sect. B, below. The process was far from a smooth one: in Catholic towns, guilds were also foci of Counter-Reformation piety, and in the period from 1585 to 1596 they placed Church before State. An overall account of incorporation (complete with nostalgic backward glances) is F. Olivier-Martin, *L'Organisation corporative de la France d'Ancien Régime* (Paris, 1938). For the structure of the Ancien Régime polity, the best guides remain D. Richet, *La France moderne: L'Esprit des institutions* (Paris, 1973); P. Goubert, *L'Ancien Régime*, ii. *Les Pouvoirs* (Paris, 1973); and, more recently, E. Le Roy Ladurie, *The French Royal State, 1460–1610* (Oxford, 1994).

[21] For a detailed discussion, see Ch. 3, Sect. B, below.

Nevertheless, the rules of the arts of physic were set from the top. The adjudication of questions of authority and legitimacy in medical practice and ideas was largely determined by the play of forces within this corporative pyramid.

A physician's opinion on a medical issue was thus worth more than a surgeon's because the former was situated more favourably within the corporative medical community than the latter. Yet it also counted for what it did because epistemologically physic was adjudged to represent a higher form of knowledge: physicians outranked others because of their superior understanding of the canonical medical texts on which scientific veracity and authority rested. The tripartite division of the medical community corresponded to the triple character which learned culture accorded medical care: namely, the (very superior) arts of diagnosis and prescription, in which physicians specialized; the art of performing operations and deploying manual skill, which was the task of the surgeons; and the art of preparing and administering drugs and medicine, the responsibility which the apothecaries assumed.

In a world in which medical authority was thus both a matter of law and a reflection of the structure of knowledge, the corporative body which shone pre-eminently above all others was the Paris Medical Faculty.[22] Part of what was from the Middle Ages the greatest university in western Europe, the Paris Faculty not only enjoyed fuller rights in securing its graduates legal recognition to practise, it also laid claim to teaching the purest forms of medical doctrine. Within the medical world, its collective judgements were difficult to resist, since it could claim to speak from the very apex of the pyramid of medical learning and also from a position at the very heart of the corporative medical community.

The potential of the tripartite organization for engendering tension and conflict was thus tempered by the way in which the corporative structure harmonized with an analogously composed intellectual structure. Room for conflict was also narrowed by the fact that the trained, incorporated sector of the medical community served a rather different social constituency from their untrained colleagues. Highly dependent for their living on the patronage of the great, the former looked to the court, the nobility, and the urban wealthy for their clients. Before roughly 1680, it seems, there was far more activity before the lawcourts concerning disputes between the three constituent components of the corporative medical community than between that community as a whole and the body of unincorporated practitioners, who serviced a rather different clientele. Even so, those quarrels were seldom dramatic or permanent. The

[22] L. W. B. Brockliss, 'The University of Paris in the Sixteenth and Seventeenth Centuries', Ph.D. diss., Cambridge, 1976, esp. chs. 3, 6. Parisian pre-eminence was contested every inch of the way throughout our period, it should be noted, by the ancient university foundation of Montpellier.

medical world, until the end of the seventeenth century, remained in some sort of equilibrium.

It remains unclear—the historiographical record is spotty[23]—whether other states experienced the same kind of equilibrium which we are suggesting was achieved in France. As far as we can tell, the fact of medical incorporation in France in the sixteenth and seventeenth centuries was largely mirrored elsewhere in continental Europe. The first European region to have a sophisticated network of medical bodies had been northern Italy, where there were already clearly defined corporations of physicians, surgeons, and apothecaries in many towns by 1400—presumably a reflection of the precocious urban development of Renaissance Italy.[24] North of the Alps, the processes of incorporation happened after 1500, and very unevenly. The tempo and character of incorporation in France seems to have been largely matched in the Netherlands and Rhineland Germany. The British Isles, however, remained somewhat aloof from the development. Here, all brands of medical practitioner were only ever organized into distinctive medical corporations in a handful of towns (London, York, Norwich, Edinburgh, Glasgow, and belatedly Dublin). Here too there could be conflict rather than equilibrium in the medical world, as is demonstrated by H. J. Cook's study of the London medical community in the seventeenth century, which shows far more conflict between the corporative and non-corporative world than in France.[25] Generally in urban England, where medical practitioners were incorporated, they were not distinguished from other trades. Thus at Andover in Hampshire in the early seventeenth century, apothecaries belonged to the Company of Leathermen, while surgeons were part of the Haberdashers' Company.[26]

[23] We have excellent materials for early modern England, and good work has also been done on parts of Spain and the Italian peninsula. Much of the most exciting work in these Continental areas has emerged from North American campuses.

[24] The most detailed study in English of the corporative medical community in Italy is K. Park, *Doctors and Medicine in Early Renaissance Florence* (Princeton, 1985). For surgical corporations specifically—as well as for the best overall account of medicine in Europe prior to the period covered in the present volume—see N. G. Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (London, 1990), esp. ch. 6.

[25] *The Decline of the Old Medical Regime in Stuart London* (London, 1986).

[26] The most helpful introductions to the situation in England are M. Pelling and C. Webster, 'Medical Practitioners', in C. Webster (ed.), *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge, 1979); and R. Porter, *Disease, Medicine and Society in England, 1550–1860* (London, 1987). See also J. Lane, 'The Medical Practitioners of Provincial England in 1783', *Medical History*, 28 (1984), 353–71. For London, see Cook, *The Decline of the Old Medical Régime*, esp. chs. 1, 2. There are a number of detailed histories of the individual medical corporations: e.g. G. Clark, *A History of the Royal College of Physicians of London* (2 vols.; Oxford, 1964); C. Cameron, *A History of the Royal College of Surgeons in Ireland and of the Irish School of Medicine* (Dublin, 1886); and more recently R. Stott, 'The Incorporation of Surgeons and Medical Education and Practice in Edinburgh, 1696–1755', Ph.D. diss., Edinburgh, 1984. It should be noted

Though the low level of incorporation in Scotland and Ireland clearly reflected something of the underdeveloped character of their economy, this hardly accounts for the distinctive English experience. There was—London apart—a shortage of really large towns in sixteenth- and seventeenth-century England, but a significant part of the population overall was urbanized. It is possible that the Reformation may have made an impact on incorporation, since the guild system was, prior to 1534, closely associated with late medieval forms of piety. Yet the growth of a Reformation state seems not to have inhibited the growth of a corporative medical community in the neighbouring United Provinces. In both parts of the Netherlands in fact (though strangely not in the partially enclaved principality of Liège) a dense network of medical corporations emerged in the seventeenth century, including the foundation of specific colleges of physicians in most towns.[27] The English common law may also have been a factor in play. It was a principle of the common law that any individual had the right to practise medicine, subject only to the restrictions of the criminal law. However, this can only offer a partial explanation, since the civil law operating in most of Europe and based on Roman antiquity and interpreted by the scholastics was equally hostile to trade monopolies and only tended to recognize guilds which had been created by the prince.[28] The most plausible explanation for the English experience, however, probably lies in the peculiarly pacific, centralized, and homogeneous nature of the post-Reformation state down to the mid-seventeenth century. On the Continent (as in the case of France), central authority was either too weak to combat a further extension of the guild system, or else it was forced to work through corporative bodies in order to build up (or rebuild) its authority in an age of confessional strife.

Despite the Continental parallels, the exact manner in which the French corporative medical community came to be structured was not always replicated in other states. Throughout the Continent, it was generally accepted that trained medical practitioners fell into the classic three categories. Yet most countries did not follow the French example in having separate corporative bodies for

that some British corporations had licensing powers over quite a wide area. Theoretically the King and Queen's College of Physicians founded in Dublin in 1692 had the power to license physicians for all Ireland (except graduates of Oxford, Cambridge, and Trinity College, Dublin): Cameron, *History*, 92–3.

[27] P. H. Brans, 'Les Collèges médicaux dans les Pays-Bas méridionaux', *Janus*, 46 (1957), 25–40; W. Frijhoff, '*Non satis dignitatis* ... Over de maatschaapelijke status van geneeskundigen tijdens de Republiek', *Tijdschrift voor Geschiedenis*, 96 (1983), 379–406; C. Havelange, *Les Figures de la guérison (XVIIIe–XIXe siècles): Une histoire sociale et culturelle des professions médicales au pays de Liège* (Paris, 1990); F. Huisman, *Stadsbelang en standbesef: Gesondheidzorg en medisch beroep in Groeningen, 1500–1730* (Rotterdam, 1992).

[28] A. Black, *Guilds and Civil Society in European Political Thought from the Twelfth Century to the Present* (London, 1984), esp. chs. 2 and 3.

each: physicians, surgeons (often doubling with barbers), and apothecaries (frequently linked to spicers).[29] Normally, one corporative umbrella sufficed, as in Florence, for example, in the fourteenth and fifteenth centuries, where all medical practitioners belonged to a giant guild of doctors, apothecaries, and grocers, and where the doctors' section included physicians, surgeons, and even licensed 'empirics' (that is, practitioners, generally with a surgical skill, who had neither attended university nor served an apprenticeship).[30] That in this instance physicians and surgeons could rub corporative shoulders must have reflected the fact that in Renaissance Italy an élite of surgeons had a university education and consequently enjoyed high status.[31] But even in those numerous regions in Europe in which surgeons were considered merely manual operatives it was commonplace in the seventeenth century for physicians and surgeons to be organized within the same corporation, as at Glasgow from 1599 and Ghent after 1664 (in a corps which also included the apothecaries). In such cases, we can be sure, physicians lorded it over their colleagues.[32]

Another significant way in which the organization of the corporative community elsewhere departed from the French model was as regards the relative independence of the separate corps. In France, though communities of surgeons and apothecaries were usually obliged to accept the dominance of the physicians as regards supervision of their examinations, in most other ways they managed to secure a good degree of independence both from the physicians and from other outside bodies, including the crown. Elsewhere, the state kept a much closer eye over corporative existence. In northern Italy, the Low Countries, Switzerland, and Germany, it was commonplace for towns to have a town physician (*Stadtarzt*), a municipal or state agent who dealt with matters of public health, advised on epidemic diseases (especially the plague) and treated the poor. In some states, there was even permanent central government supervision of the medical community. In Philip II's Spain, the organization of health care was ultimately in the hands of the royal *protomedico*. In Italy, *protomedici* were

[29] In general, the separation of the French surgeons and barbers only occurred in the 18th cent. See below, esp. Chs. 3, Sect. B; 8, Sect. A; and 9.

[30] Each subgroup of the giant guild also controlled other groups of artisans, such as the barbers, printers, and undertakers. From 1560 control of the corporative medical community in Florence was entrusted to an élite of twelve physicians, called the College of Doctors: see Park, *Florence*, chs. 1, 2, and conclusion.

[31] C. Cipolla, *Public Health and the Medical Profession in the Renaissance* (Cambridge, 1976), 74 ff. exaggerates the distinction in status between physicians and surgeons in early 17th-cent. Italy. In certain universities in the peninsula it was possible to take a degree in surgery, a practice unheard of elsewhere in Europe.

[32] A. van der Eeken, 'De uitbow van de medische sector te Gent in de achttiende eeuw', licentiate diss., Rijksuniversiteit Gent, 1983–4, esp. 35 ff. In the British Isles, only in London were the three arms organized separately. In Edinburgh and Dublin, surgeons and apothecaries were united in one corps; Dublin apothecaries gained separate incorporation in 1745.

important too—in highly developed Tuscany, for example, the state had a permanent health board.[33] In France, not only was the municipal physician a rarity, but no court-based physician had the legal right to supervise all or part of the community for most of the sixteenth and seventeenth centuries. Until 1668 the king's premier barber claimed the right to supervise incorporated barbers throughout the realm (and hence barber surgeons), but there is no evidence that he ever became a conduit for closer royal supervision of surgery.[34]

As far as the evidence allows us to judge, then, it would appear that, in the European scales, the French corporative medical community was particularly widespread, strong, and intellectually vibrant. It exerted its hegemony over all others practising medicine in what we have called the 'medical penumbra'—a term we use to denote the congeries of groups and individuals who, though invariably lacking formal training or corporative status, nevertheless operated either by custom or right within the medical domain—within, in fact, the medical world.[35] We might profitably represent the structure of the medical world in the form of a Venn diagram. At the centre of the field is lodged the trained and legally authorized corporative medical community, and around it is a more variable and indeterminate penumbra of individuals who lack full authorization and/or training. Core and penumbra can then be subdivided into a multiplicity of smaller circular sets. Inside the core (the corporative medical community), congeries of these circles represent the relatively independent and isolated corps united most by the similarity of their organization and purpose and their legal authorization. Outside the core, in the medical penumbra, are located the plethora of different types of 'popular' medical practitioner, male and female, rich and poor, educated and uneducated, and so on. These circles are larger, overlap, and in part pierce the inner heart: medical core and penumbra overlap.

[33] See A. W. Russell (ed.), *The Town and State Physician in Europe from the Middle Ages to the Enlightenment* (Wolffenbüttel, 1981). For the 16th cent. specifically, cf. M. J. van Lieburg, 'Over de stadsmedicus in de Nord-Nederlandse steden van de 16 eeuw', in H. L. Houtzager (ed.), *Pieter van Foreest, Een Hollands medicus in de zestiende eeuw* (Amsterdam, 1989), 42 ff. For Italy, D. Gentilcore, ' "All That Pertains to Medicine": *Protomedici* and *Protomedicati* in Early Modern Italy', *Medical History*, 35 (1994), 121–42; and C. Cipolla, *Miasmas and Disease: Public Health and the Environment in the Pre-Industrial Age* (London, 1992) (the Florentine health board became a permanent institution in 1527). See also J. T. Lanning, *The Royal Protomedicato: The Regulation of the Medical Profession in the Spanish Empire* (Durham, NC, 1985), ch. 1.

[34] See below, Ch. 3, Sect. B. Though in France, town physicians did exist, they were closely linked to plague outbreaks and were rarely highly developed organizationally. German-influenced Alsace and Lorraine, where the system was strongly rooted, was an exception. See below, Ch. 12, Sect. B. For the role of the court, in France and elsewhere in Europe, see V. Nutton (ed.), *Medicine at the Courts of Europe, 1500–1837* (London, 1990); and B. T. Moran (ed.), *Patronage and Institutions: Science, Technology and Medicine at the European Court, 1500–1750* (Bury St Edmunds, 1991).

[35] Hence: corporative medical community + medical penumbra = medical world.

The core–penumbra medical model we are deploying is rather different from the analytical dyad of élite–popular medicine which has been a distinguishing characteristic of much new medical history, including American scholar Matthew Ramsey's fine account of the wider medical community in the late eighteenth and early nineteenth centuries, *Professional and Popular Medicine in France, 1770–1830*. The two-tiered cultural model is tributary to a much more widely accepted division between élite and popular culture, which was one of the most fruitful historical research categories of the 1970s and 1980s.[36] In the case of medicine, however, the model has had the unfortunate effect of ranging historians either one side or the other of an early modern battleline. On one hand, many historians—including many *Annalistes*—have branded irregular practitioners as incompetent charlatans preying upon the superstitious and uneducated, and have regarded levels of 'medicalization' (the ratio of trained personnel to the population as a whole) as the be-all and end-all of health care within society. This view conforms to the tendency of regarding the community of legal practitioners as the embryonic medical 'profession' destined to extend their authority throughout society. It is in addition, curiously, the obverse of a historiographical coin on which is also emblazoned the idea that so-called medical charlatans were in fact indigenous healers whose wholly beneficial influence was cut short by the progress of the nefarious medical professions. This line of argument has been posed most starkly by feminist scholars who have highlighted the gendered nature of the élite attack on charlatans.[37]

There are some parts of these analyses which we would endorse, even as we reject the analytical strategy of segregating popular from professional medicine. We would hardly contend that the learning of, say, an unlettered Breton healer was identical to that of a doctor-regent of the Paris Faculty of Medicine. Nor would we deny that there were powerful, and accelerating, moves to 'masculinize' medical practice throughout the period, most notably in midwifery. Nevertheless, to regard the medical world as two dichotomized halves each essentially generating its own version of medical culture is, we believe, seriously to misread the way in which medical ideas were diffused in the early modern

[36] M. Ramsey, *Professional and Popular Medicine in France, 1770–1830: The Social World of Medical Practice* (Cambridge, 1988). A fine, canonical work here is P. Burke, *Popular Culture in Early Modern Europe* (London, 1978). Important for France is work on the so-called Bibliothèque bleue: see R. Mandrou, *De la culture populaire aux XVIIe et XVIIIe siècles* (Paris, 1964). The notion takes a terrific pounding in T. Harris, 'Problematising Popular Culture', in id. (ed.), *Popular Culture in England, c.1500–1800* (London, 1995).

[37] The feminist scholars B. Ehrenreich and D. English, in their *Witches, Midwives and Nurses: A History of Women Healers* (London, 1976) were pioneers here, but have been subjected to some withering criticisms. See now, however, M. Laget, *Naissances: L'Accouchement avant l'âge de la clinique* (Paris, 1982); J. Gélis, *La Sage-femme ou le médecin? Une nouvelle conception de la vie* (Paris, 1988); and H. Marland (ed.), *The Art of Midwifery: Early Modern Midwives in Europe* (London, 1993).

period. We are dubious of claims that 'popular culture' (were we to accept the term as anything more than a broadly heuristic notion) generated a clearly distinct and autonomous medical culture outside 'élite' influence—and dubious too that, even if it were indeed adjudged to have done so, we would have any reliable means of having access to it.

Although the spread of legal incorporation was predicated on attempts to limit rights to practise and to erect a wall between trained and untrained practitioners, in fact, in a way that was highly characteristic of the Ancien Régime polity, exceptions were written into the rules, producing a very diffuse and complex pattern. Where trained medical practitioners had formed themselves into a corps and received royal endorsement, for example, training counted for nothing if individuals did not possess the necessary qualifications to be admitted into the corps. Thus graduate physicians trained in Montpellier could not legally practise medicine in the capital, for in Paris only the Parisian corporation of physicians had this right, and membership of this was reserved to those who had graduated from the Paris Faculty. Thus Montpellier graduates who wished to practise here had to take a second degree in Paris—as some in fact did (while those who did not risked outright branding as quacks). The case of Paris also highlights a further feature of the diffuse character of the medical community, namely the fact that, notwithstanding these prohibitions and the faculty's policing of corporative boundaries, it was still possible to practise in the capital with special royal permission. The king could trump with one hand the corporatism which, with the other, he had created and endorsed. This permission to practise in the capital was given as a dynastic favour to members of the royal medical household; that is, to the personal physicians, surgeons, and apothecaries of the ruler. On an individual basis, a royal *brevet* (warrant) could also be accorded an individual, whatever his level of training, if the monarch adjudged it in the interests of the public good.

The latter point highlights the closeness of the dealings of the corporative medical community with practitioners on the margins of the community who lacked an established or legally secure foothold within it. The fact was that the most unlettered quack, shameless charlatan, or unscrupulous con-artist could penetrate the medical community with impunity if they had the requisite measure of support within the social élite or royal court. On his death-bed, Louis XIV was attended by the most illustrious members of the Paris Faculty and the royal medical household—but also by a yokel claiming to be blessed with a healing gift.[38] Corporatism produced some strange bedfellows.

There was thus a good deal of play within the corporative medical community created in the sixteenth and seventeenth centuries for intense and numerous

[38] See below, Ch. 5, Sect. A.

dealings involving trained and untrained practitioners. To a much greater extent than historians have been willing to acknowledge, the popular healer and the physician inhabited a unitary world, and élite and popular medicine were contiguous or overlapping rather than antipodean or dichotomous. This point is strengthened when we examine medical ideas and language: to a very considerable extent, especially in the sixteenth and seventeenth centuries, trained and untrained practitioners participated in a shared medical discourse. That discourse was grounded in Galenic theory. Galen's theory of the humours was a highly pervasive and influential one on the cosmology of medieval and early modern Europe. It formed the fundamentals of medical theory known to the educated élite from their schooldays, and was popularized through versions of contemporary medical ideas circulated freely and widely in print. Naturally, there were very great differences in the extent to which trained and untrained practitioners could articulate that discourse or use it creatively. Yet so protean were its forms, so pervasive its influence, that it seemed impossible to escape it. Even in terms of the erudite avant-garde, it survived Vesalius' anatomical drawings which highlighted deficiencies in Galenic anatomy; it sucked down and digested a philosophy as apparently antagonistic as Paracelsianism; and it had a fair shot at resisting Harveian circulationism for nearly half a century.[39]

Galenism was arguably even more critical in what historians have termed 'popular medicine'. A good proportion of the medical ideas underpinning popular medical practice were authentically Galenic, originating in the learned culture of the élite. The essentials of the dietary and preservative health hints which passed as popular medicine down to the nineteenth century were derived, at times almost verbatim, from the eleventh-century learned medical source, the precepts of the so-called School of Salerno.[40] Much popular medicine was out-of-date or misunderstood élite medicine (and a bigger proportion than we usually allow was probably correctly observed and implemented élite medicine, performed by untrained practitioners). If medical core and penumbra rubbed along together pretty well for the most part, then, this was partly due to the hegemony of a plastic and capacious medical ideology, and partly too because of their rather different geographical and social distribution, with penumbra and core catering to different markets: the corporative community dominated the towns, and had an increasingly feeble domination of medical practice the more remote city walls became.

The medical ideas common among the lower classes had sources other than Galenism too of course, notably oral tradition, collective memory, and folkloric

[39] See below, Ch. 2, Sects. E and F.

[40] For continuing Salernian influences at the start of our period, see N. Z. Davis, 'Proverbial Wisdom and Popular Errors', in ead., *Society and Culture in Early Modern France* (Stanford, Calif., 1965), esp. 259, 344. For the influence of the school on faculty teaching, see below, Ch. 7, Sect E.

precedent. However, all of these remain—alas!—almost totally beyond our reach, certainly in anything like their pristine form. Furthermore, so close were links with learned medicine that the historian is taking an enormous risk in assuming that almost any health measure—howsoever outlandish or apparently wild—sprang chthonically from the subsoil of popular culture. Matthew Ramsey, for example, perhaps the most sophisticated user of the category of popular medicine in the history of early modern France cites the case of a parish priest in the Alpine village of Sigoyer in the 1820s hanging a patient afflicted with a tapeworm upside down from a hook above a bowl of warm milk, and then seizing the worm when it poked its head out to drink the milk. Yet such a wonderfully colourful example of popular medicine turns out to reproduce a cure that appeared, together with a woodcut, in H. Brunschwig's *Cirurgia* in 1497![41]

In our quarrel with the élite–popular dichotomy, we are consciously following historians such as Stuart Clark, Roger Chartier, and more recently Tim Harris, who have questioned the importance of the divide between 'high' and 'low' culture, and have argued forcefully in favour of intense cultural exchange across the putatively binary divide.[42] Certainly too, the cultural traffic was not all one way. There are numerous examples—some of which we will cite—of trained physicians learning from the untrained and even the folkloric, though it is noteworthy that this process was more in evidence in the sixteenth and seventeenth than in the eighteenth century.[43] Nor should it be supposed that popular medicine's borrowings from learned culture were restricted to the ideas and treatments of the orthodox medical community. Practitioners within the medical penumbra (and more than a few within the medical core) drew heavily too at the well of the Church: religious explanations for disease were an important determinant of health care in both core and penumbra, and members of the regular orders in particular were a fecund source of therapeutic novelty. Historians are sometimes prone to label as popular medical culture phenomena which should more accurately be described as popular investments in the 'baroque

[41] Ramsey, *Popular and Professional Medicine*, 228. Cf. the review article by C. Jones, 'Medicine, Madness and Mayhem from the *Roi Soleil* to the Golden Age of Hysteria', *French History*, 4 (1990), 378–88. For the interesting counter-view that the texts of antiquity may be expressions of medical views predating them and transmitted across the centuries in popular culture, see S. Ott, 'Aristotle among the Basques: The "Cheese-Analogy" of Conception', *Man*, 14 (1979), 699–711, commented on in Duden, *The Woman beneath the Skin*, 35 ff.

[42] Chartier, *The Culture of Print* (Cambridge, 1989); Clark, 'French Historians and Early Modern Popular Culture', *Past and Present*, 100 (1983), 62–99; and (for England), Harris, 'Problematising Popular Culture'. See too M. Fissell, 'Readers, Texts and Contexts: Vernacular Medical Works in Early Modern England', in Porter (ed.), *Popularization of Medicine*.

[43] A useful ex. of an analysis of 'popular medicine' leading on to an appreciation of the complexity and reciprocity of the borrowings between élite and people is P. Slack, ' "Mirrors of Health and Treasures of Poor Men": The Uses of the Vernacular Medical Literature of Tudor England', in C. Webster (ed.), *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge, 1979).

piety' characterizing orthodox religious culture.[44] To reject the élite–popular dichotomy is emphatically not to suggest that we regard all medicine practised among the lower orders as deriving from the élite. Rather, we wish to alert readers to the complexity and the dynamism of the relationships between learned and popular culture, and to the dangers of regarding popular medicine as something *sui generis* and equipped with its own autonomy and inner dynamic.

The point of view of the sick person should also be enlisted as a further factor highlighting the unitary nature of the early modern medical world.[45] As far as we can judge, it would seem that a great many patients regarded medical core and penumbra as quantitatively rather than qualitatively differentiated (and shading too into the assorted material and medical services on offer from within the Church). Much to the persistent chagrin of trained practitioners, the sick frequently placed themselves in the hands of others when they fell ill. Physicians and surgeons continually complained that they were approached only when it was too late, or when a bodged operation had left the sick person permanently disabled, and they bitterly attacked the anti-medicine performed by 'empirics' and 'medical charlatans'. Yet the sick themselves seem not to have seen matters in anything like such a polarized light, but rather detected similarity and overlap in treatments of untrained and the trained that the latter affected not to see. Trained and untrained practitioners were largely viewed as offering an à la carte range of services, from which a choice was made according to a hierarchy of resort which was subject to constraints such as relative accessibility, geographical remoteness, size of personal income, religious predisposition, the nature, circumstances, or phase of an illness or medical condition, and so on.

The underlying community of ideas, along with factors relating to the sociology and geography of trained and untrained practice, meant that patients too saw no radical incommensurability between the two types of practitioner, but rather saw them as operating within the same spectrum of health services. The 'health career' of most individuals in the sixteenth and seventeenth centuries may also have disposed people towards this kind of approach. This is apparent when we extend our analysis to a consideration of the early modern 'pathosystem': the ensemble of morbid states coexisting within society.[46] One of the most distinctive features of the 'epidemiological landscape' of early modern France—its portfolio, so to speak, of infectious diseases—was the prevalent and

[44] e.g. the account of *ex-votos* below, Ch. 1, Sect. D.

[45] There is an excellent and extended recent treatment of this point in M. Fissell, *Patients, Power and the Poor in Eighteenth-Century Bristol* (Cambridge, 1991), esp. ch. 2.

[46] The neologism is a nod towards the notion of *pathocénose* outlined in M. D. Grmek, 'Préliminaires d'une étude historique des maladies', *Annales ESC* 24 (1969), 1474: 'les états pathologiques au sein d'une population déterminée dans le temps et dans l'espace'. Implicit in the term is the notion that diseases live in a state of homeostatic equilibrium with the society which contains them.

continuing danger of bubonic plague.[47] Plague killed—and it frightened. Deaths caused by it were so colossal, that mortal fear became a banal reality. Representations of the plague-wracked body became a kind of paroxysmic template of catastrophe, a form of death in life, which shaped how all serious diseases and life-threatening events were viewed, and how the body was conceptualized.

Plague also invariably had the effect of removing or thinning the protective shield against disease which trained medical practitioners claimed to offer. The medical community was invariably swift to take its own advice against plague—'cito, longe, tarde' ('leave early, go far, come back late')—with the result that plague-afflicted towns were soon likely to be deserted of all physicians and most surgeons and apothecaries too. A plague epidemic wreaked enormous biological damage on an affected location, but those city-dwellers who survived it would more than likely have ingested the remedies of untrained as well as or instead of the remedies of the trained. Plague thus probably operated to stimulate a certain fatalism in time of catastrophe, but also to encourage some degree of levelling down in expectations as regards remedies. Prayer was probably adjudged a more secure remedy than the treatment of the physician. A healthy scepticism as regards medical treatments whatever their provenance seems to have resulted. As arch-satirist Molière realized only too well, the sick expected miracles. Yet for most of the time they remained extremely moderate in their expectations. If then, the early modern physician was modest, this was partly because he had much to be modest about; but partly too because demands made on him were, generally, fairly limited.

C. The Decline and Fall of the Corporative Medical Community

Part I of the present volume charts the processes by which France's distinctive medical system, with its strongly corporative orientation, was developed and consolidated. In Part II, we examine that system's erosion and ultimate collapse in 'the long eighteenth century', from the last decades of the seventeenth century down to (and in some respects into) the Revolutionary and Napoleonic era. Though, as we shall see, the corporative organization of the medical community remained largely unchanged right through to 1789, by then the whole equilibrium of the system had been irrevocably shattered. The establishment of the 'Paris School' in the 1790s, widely accredited as the birth of modern medicine, with its orientation around the hospital, anatomo-clinical method, and the merger of physic and surgery, was, we argue, clearly foreshadowed prior to 1789.[48]

[47] Biraben, *Hommes et la peste*, *passim*. See below, Chs. 1, 6.

[48] For four very different accounts of this process, see E. H. Ackerknecht, *Medicine in the Paris Hospital, 1794–1848* (Baltimore, 1967); Foucault, *Birth of the Clinic*; D. M. Vess, *Medical Revolu-*

In the course of the eighteenth century, the formal structure of the medical world changed little, though the legal monopoly of the corporative medical community was extended and the crown attempted to bring practitioners more closely under state supervision. Representatives of the crown or its agents were introduced into the corporations of physicians and surgeons, general regulations were drawn up concerning the training and examination of both groups, and a central governmental committee (from 1778 the Royal Society of Medicine (Société royale de Médecine)) was established to license new remedies, supervise the exploitation of mineral water therapy, and map epidemics and epizootics. But there were no fundamental changes to the corporative organization of the medical community. The legal practice of medicine was never confined solely to trained medical practitioners, and the corporative medical community (especially the apothecaries) was never subjected to permanent state intervention. There was no serious attempt to establish a network of state-funded medical personnel—though some were talking about it as a possibility by 1789. Though a rhetoric of hostility to quacks and charlatans remained very much in place, moreover, no progress was made in the outlawing of medical irregulars.

Yet in spite of so many signs of formal stasis, the medical world in the eighteenth century was in a state of flux, and by 1789 on the point of imploding under the weight of emerging tensions and pressures. A number of developments highlighted this sea change. The three different branches of the corporative medical community seemed to be increasingly unwilling to stick to their customary lasts. Often supported by their corporations, surgeons in particular endeavoured to transgress legal boundaries by effectively setting themselves up as the physicians and apothecaries of the rich. Physicians too in return began to poach on the traditional terrain of the surgeons, especially in lucrative branches such as the treatment of venereal diseases. In consequence, the century witnessed a rapid and vast increase in the number of conflicts in the lawcourts between the three branches of the community. Relations between physicians and surgeons in the capital were particularly bad, and the physicians found themselves continually worsted as the crown and the Parlement of Paris took the side of the surgeons.[49] There was also a significant deterioration over the century, which we shall chart,[50] in relations between the corporative core and the medical penumbra. The old division of labour between core and penumbra seemed to be breaking down, as everyone got in everyone else's way.

tion in France, 1789–1796 (Gainesville, Fla., 1975); and T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980).

[49] Gelfand, *Professionalizing Modern Medicine* is good on these changes—though we feel he takes the side of the surgeons a little too readily.

[50] See Ch. 10, below.

Historians have rather underplayed (where they have even noticed) this much more fluid and dynamic situation in the eighteenth century.[51] They have remarked on the clash between physic and surgery, but this is conventionally seen in terms of the so-called rise of surgery.[52] The latter was a phenomenon at once technical (improved surgical instrumentation and deployment); institutional (royal support, channelled through powerful premier surgeons, giving élite surgeons academic status and institutional clout); and educational (reforms aimed to make surgery both a liberal arts qualification like physic and a hands-on discipline). It was also a propaganda triumph: the surgeons took on the Paris physicians in a polemical battle, which raged especially fiercely in the 1740s, and won hands down. Their triumph was to persuade the growing public that their art was more useful within society than that of the physicians—a reassuring contention which resonated warmly with the general meliorist mood (and its darker roots in collective anxieties about morbidity). Trained surgeons in the big cities had definitely become more competent as the century wore on. Their propagandists proudly championed their specialisms as the one really secure part of medicine, thus reversing the traditional status distinction between physicians and surgeons. Though the former were often frankly contemptuous of the surgeons' claims to parity, let alone superiority, many could see the justice in their arguments about the need for greater anatomical and physiological knowledge and greater hands-on instruction. The *philosophe*-physician Julien Offray de La Mettrie (1709–51) satirized the unwillingness of his peers to take seriously new forms of surgical intervention which seemed to have enormous potential for social good.[53]

The success of the surgeons' propaganda in the eighteenth century should not of course be a reason for historians believing it. In the present work, we will be arguing that the rise of surgery needs to be inserted into a far broader set of factors in the demographic, economic, social, cultural, intellectual, and indeed political domains which were reshaping, to a greater or lesser extent, all facets of French life over the eighteenth century. Critical was the impact of changes in the

[51] Symptomatic in this respect is the periodization employed by even the best recent studies: Lebrun, *Médecins, saints et sorciers* treats the 17th and 18th cents. as a homogeneous whole, while Ramsey, *Professional and Popular Medicine*, dates change from 1789.

[52] See esp. Gelfand, *Professionalizing Modern Medicine*. For a critique and appreciation of this work, see C. Jones, ' "Professionalizing Modern Medicine" in French Hospitals', *Medical History*, 26 (1982), 341–9. As will become clear in the text, we have some fundamental differences of opinion with this fine book which, we feel, overestimates the impact of innovatory practices within the surgical corps as a whole and which also systematically underestimates changes taking place within the world of physic.

[53] We differ on this from the recent book by K. Wellman, *La Mettrie: Medicine, Philosophy and Enlightenment* (Durham, NC, 1992), which makes La Mettrie a supporter of the surgeons. Wellman is underestimating La Mettrie's irony, and the strength of his underlying attachment to a reformed physic.

pathosystem. Plague, we argue, had been enormously important in the sixteenth and seventeenth centuries not simply because of the body-count it garnered, but also in the *mentalité* it had stimulated among the population as a whole: fatalism about the disease and scepticism (and alternatively, a blithe credulousness) about those who sought to offer remedies against it. The decline (from the 1660s) and then disappearance (after 1720) of bubonic plague removed the biggest killer in early modern Europe's array of infectious diseases. The decline in mortality which this caused helped contribute towards the beginnings in France of the 'demographic transition', from high to low birth and death rates. Arguably just as importantly, however, the demise of the disease contributed powerfully towards the transformation in *mentalités* which took place in Enlightenment France. A decline in observance of post-Tridentine forms of baroque piety—palpable in everything from funeral arrangements, anxiety about purgatory and hell, processional forms, clerical vocations, to non-observance of the Church's prohibition on premarital sex and contraception—highlighted what some have dubbed a dechristianization of French society. The term has been disputed:[54] but there can be little contesting the more optimistic, materialistic perception of collective human existence which these phenomena also seemed to signal. With hellfire only on the back-burner, opportunities for terrestrial amelioration seemed a distinct and welcomed possibility. The diseased body was no longer a plague-wracked site of lethal trauma, a living death; rather, it was a mechanism whose malfunctionings could be understood, and maybe fixed. Such views were tributary of, but also fed into, a broader optimism nurtured by the intellectual movement of Enlightenment. The mood of medicine was shifting from an erudite scepticism to a 'can-do' functionalist meliorism.

The eighteenth century witnessed economic growth which also, like these intellectual advances and shifts in *mentalité*, nurtured a quiet optimism in the élite. The economy boomed, especially after *c.*1730, and in many respects out-performed France's neighbour England, then in the early stages of its Industrial Revolution. This growth stimulated population, though it was spasmodically threatened too by population increase as pressure was put on resources. But people no longer starved. Studies of material culture also

[54] Cf. G. Le Bras, 'Déchristianisation: Mot fallacieux', *Social Compass*, 6 (1963), 445–52; J. Delumeau, *Le Catholicisme entre Luther et Voltaire* (Paris, 1971), ch. 5; and id., 'Au sujet de la déchristianization', *Revue historique*, 22 (1975), 52–60. For baroque piety, see esp. M. Vovelle, *Piété baroque et déchristianisation en Provence au* XVIII*e siècle* (Paris, 1973). See too J. McManners, *Death and the Enlightenment: Changing Attitudes to Death among Christians and Unbelievers in Eighteenth-Century France* (Oxford, 1981), esp. ch. 13. For the broader demographic changes, see J. Dupâquier (ed.), *Histoire de la population française*, ii. *De la Renaissance à la Révolution* (Paris, 1988); and for their health implications, see W. F. Bynum, 'Health, Disease and Medical Care', in G. S. Rousseau and R. Porter (eds.), *The Ferment of Knowledge* (Cambridge, 1980).

suggest the formation, especially after mid-century, of a good deal of social mobility and the growth of a powerful consumer market. Significantly from the point of view of medicine, the sector of the population which was affluent enough to receive the care of trained medical personnel rose dramatically and figured among the most striking beneficiaries of economic change: the size of the bourgeoisie is estimated to have tripled between 1700 and 1789 (the total population grew by only about one-third).[55] The possibilities of access by the population at large to a trained medical practitioner by the late eighteenth century was, moreover, relatively good—better, it has been claimed, than it would be a century later.[56]

These factors combined to produce a transformation of the realities of, and attitudes towards, health and health care. The decline of mortality crises and the transformation of the pathosystem emphatically did not mean the decline of morbidity. On the contrary, as James Riley has shrewdly pointed out, it almost certainly may be adjudged to have increased it.[57] Axiomatically, the end of the killer disease left many of its potential victims available for other pathological forms—none of which, however, came close to matching plague's lethality. In addition, the complex of intellectual and cultural factors we are exploring probably amplified the subjective boundaries of morbidity. There was less tendency to seek (or to seek only) religious causation for sickness. With the affluent seemingly less willing than before to accept that acute diseases were harbingers of death, and less willing also stoically to suffer the effects of chronic illness or congenital disability, there was a tendency to seek material remedies—and to seek them where they could be found. The sunny optimism of medical functionalism was, however, only a veneer obscuring more general anxieties about the material (rather than the metaphysical) parameters of the human condition. Though the paradoxes of the phenomenon are clear enough, a mixture of demographic, economic, and cultural factors made this age of Enlightenment medical optimism a 'golden age of morbidity', and a consequent boom-time in demand for health services.

In the present state of research, it is difficult to say to what extent the changes we are exploring for the French medical world are to be found elsewhere in

[55] According to Pierre Léon, in F. Braudel and E. Labrousse (eds.), *Histoire économique et sociale de la France*, ii. *1660–1789* (Paris, 1970), 607. For the social and economic change, see the marvellous recent survey of Daniel Roche, *La France des Lumières* (Paris, 1993) which is esp. good on consumerism and commercialism. For comparison with England, see the classic F. Crouzet, *Britain Ascendant: Comparative Studies in Franco-British Economic History* (Cambridge, 1990).

[56] T. Gelfand, 'A "Monarchical Profession" in the Old Régime: Surgeons, Ordinary Practitioners and Medical Professionalization in Eighteenth-Century France', in G. L. Geison (ed.), *Professions and the French State, 1700–1900* (Philadelphia, 1984), 154 f., 165 ff.

[57] *Sickness, Recovery and Death: A History and Forecast of Ill Health* (London, 1989); and id., *The Eighteenth-Century Campaign to Avoid Disease* (London, 1987).

Europe. It would seem, however, that France's long-enduring (if increasingly superficial) fidelity to corporative values and at least the semblances of institutional continuity were marking France out as more distinctive in the eighteenth century than it had been in the sixteenth or seventeenth. Work on the Holy Roman Empire, on Italy, on the Low Countries, and on Spain highlights how comparatively free from state intervention the French corporative community remained in the eighteenth century. In these other locales, state-backed committees increasingly took over the licensing of all trained practitioners (even if initially, as in Prussia, they had only been established to vet military physicians).[58] The weakening of the corporative shell of the medical community seems to have been conducted most vigorously in states where a bureaucratic model of medical care already existed in embryo, and where the distinctive administrative theory of the cameralists was strong. In the German states, it was the *Stadtartz*, not the medical corps, who was already the bridge between the state and the poor and sick.[59] Convinced that the prosperity of the [illegible] direct concern of the state, and that corporative priv- [illegible] nt to effective action, government in what was very [illegible] Enlightened Despotism made vigorous efforts to control [illegible] from the top, instituting practices of 'medical police'.[60]

[illegible] of statist anti-corporatism was not replicated in the wealthier, [illegible] fluid, and vigorously entrepreneurial English society (nor in its [illegible] colonies). The English medical system does not, however, seem to have been subjected to the same internal stresses and tensions as France—doubtless a consequence of the relative underdevelopment of corporatism in England, and the subsequent blurring of the boundaries between core and penumbra. Furthermore, there was little sign of moves towards the creation of an alternative, bureaucratized medical profession. Outside the army and navy

[58] R. A. Dorwart, 'The Royal College of Medicine and Public Health in Brandenburg-Prussia 1685–1740', *Medical History*, 2 (1958), 13–23; M. Stuizbecher, *Beitrager zur Berliner Medizingeschichte: Quellen und Studien zur Geschichte der Gesundheitswesen vom 17. bis 19. Jahrhundert* (Berlin, 1966); M. E. Burke, *The Royal College of San Carlos: Surgery and Spanish Medical Reform in the Late Eighteenth Century* (Durham, NC, 1977); Havelange, *Figures de la guérison*. See too the helpful long-term comparative overview of M. Ramsey, 'The Politics of Professional Monopoly in Nineteenth-Century France: The French Model and its Rivals', in Geison (ed.), *Professions and the French State*.

[59] Admittedly it would be anachronistic to view the *Stadtartz* simply as a bureaucrat, since he also acted as a private practitioner: see M. Lindemann, 'Medical Practice and Enlightenment in North Germany, 1750–1820', in R. Porter (ed.), *Medicine and the Enlightenment* (Amsterdam, 1995).

[60] Cf. M. Raeff, 'The Well-Ordered Police State and the Development of Modernity in Seventeenth- and Eighteenth-Century Europe: An Attempt at a Comparative Approach', *American Historical Review*, 80 (1975), 1221–43; and L. J. Jordanova, 'Medical Police and Public Health: Problems of Practice and Ideology', *Bulletin of the Society for the Social History of Medicine*, 27 (1980), 15–19.

there were few salaried positions—hospitals here were numbered in dozens, whereas France counted hundreds, even thousands of them. Physicians and surgeons attendant on the new English provincial hospitals and dispensaries tended to offer their services gratis, so that if the hospitals in England had become centres of teaching and research by the end of the century, they had done so as part of the omnipresent free enterprise health culture.[61]

France seems to occupy a middle position between the English (or Anglo-American) and the Enlightened Despotism models of change in medical systems in the eighteenth century. Yet it was not immune from the tendencies in medical organization which both models represented. On the contrary, one of the fascinations of the century was the way in which the characteristics of these other models were generated, and then intertwined, merged, or conflicted with the strong indigenous tradition of corporatism in France right down to the very eve of the Revolution.

It is important too to situate the transformation of the medical world not simply in the institutional context of European medical systems, but also to relate it to changes taking place generally in some of the most basic ideas about medical knowledge across the face of the Continent. When surgeons squabbled [illegible] physicians in the eighteenth century over their respective rights, for exa[illegible] this was not only a later example in a long continuum of corporative boundary-breaking and patient-poaching; it also instantiated a change that was occurring throughout Europe in the epistemological bases of medical hierarchy and authority. Emphasis on empirical learning rather than abstract theorizing was part of a broader epistemological shift in medical, and indeed scientific, ideology more generally reflected in Europe as a whole.[62] The Galenic synthesis, which held good down to roughly 1680, and which had provided the epistemological underpinnings of the intellectual hegemony of the orthodox medical community, collapsed under the impact of new mechanistic biological models forged by a subgroup drawn from within the wider European community of experimental philosophers. Galen, however, was not replaced by a single homogeneous mechanistic medical theory. Often public clashes in the first half of the eighteenth century between chemists and triturationists (who argued over the place of

[61] Hospital physicians made a great deal of money by taking on pupils at exorbitant fees. See esp. S. C. Lawrence, 'Science and Medicine at the London Hospitals: The Development of Teaching and Research, 1750–1815', Ph.D. diss., Univ. of Toronto, 1985. The pattern in France was rather different: see below, Ch. 11, Sect. D, on the difficulties of developing clinical training in the French hospital. For the free enterprise health culture, see esp. Porter, *Health for Sale*.

[62] The best introduction here is F. Duchesneau, *La Physiologie des Lumières: Empirisme, modèles et théories* (The Hague, 1982). Valuable too for a German perspective is J. Geyer-Kordesch, 'German Medical Education in the Eighteenth Century: The Prussian Context and its Influence', in W. F. Bynum and R. Porter (eds.), *William Hunter and the Eighteenth-Century Medical World* (Cambridge, 1985).

chemical reactions in determining health and disease), combined with the endless spats between physicians and surgeons to undermine the self-confidence of the corporative medical community in its customary doctrines. Doubt, moreover, was catching: the social élite also began to lose faith in the 'certainty' and 'superiority' of the orthodox knowledge of the medical community. More importantly, the second half of the eighteenth century saw the rapid dissemination of a new, 'Newtonian', non-dogmatic, and empiricist medical ideology, which also stressed the limitations of basic contemporary medical knowledge.

In the long eighteenth century, then, a plastic and protean Galenism was being replaced by a more diffident (if broadly optimistic) medical pluralism with a strong emphasis on empirical method. The institutional and epistemological structures of medical authority had been as a consequence profoundly shaken. The Paris Medical Faculty, once the very cynosure of medical legitimacy, clearly no longer held all the answers—and indeed was finding it harder and harder to master, let alone control, medical discourse. An unanswered question mark settled benignly if squarely over what had once been only the certitudes of the orthodox medical community. The decay of medical corporatism—to which these changes were umbilically linked—thus had causes both external and internal.

As well as destabilizing the corporative medical community, these changes also acted to alter the relationship between core and penumbra. Indeed, with the head of the old corporative medical community not simply under attack but almost wilfully ignored, all boundaries seemed in flux. Some practitioners—especially the physicians—dreamt of extending health care to the whole of the population, and began to be very much more hostile towards untrained practitioners (dubbed charlatans) even as they tried to supplant them in the affections of the population as a whole. The burgeoning print culture of the age—which was one of the most prominent features of the emergence of what Jurgen Habermas has dubbed 'the bourgeois public sphere'[63]—also allowed denizens of the medical penumbra to become much more daring in their invasion of the customary territory of the corporative core (as well as permitting the sick to benefit from a broader range of medical services on offer). One new form of activity was what we have called 'Quack Street'—a medical cul-de-sac off the age's 'Grub Street', comprising a motley group of hack medical writers, impresarios, quacks, and chancers. Yet this was only the most colourful offshoot of a much more generalized phenomenon of medical publicity and commercialism, which was not restricted to the capital, as the development of mail-order facilities and

[63] *The Structural Transformation of the Public Sphere: An Enquiry into a Category of Bourgeois Society* (Cambridge, Mass., 1991). See, for analysis of the concept, the essays in C. Calhoun (ed.), *Habermas and the Public Sphere* (Cambridge, Mass., 1992); and, more generally, D. Goodman, 'Public Sphere and Private Life: Towards a Synthesis of Current Historiographical Approaches to the Old Regime', *History and Theory*, 31 (1992), 1–20.

nationwide advertising campaigns demonstrated.[64] Taking advantage of the growth of literacy, the rapid development of print culture, and signal improvement in the distribution infrastructure, a plethora of individuals scattered throughout France marketed cures through handbills, journals, and newspaper advertisements. The continuity and calm of the intimate face-to-face relationship between doctor and patient was challenged by the entrepreneurial ethos of the 'Great Chain of Buying'[65] (and selling) of medical goods and services.

The development of the medical market-place was vigorous enough, moreover, to attract within it a range of trained and certified medical practitioners as well as community marginals. There were physicians—even luminaries of the Paris Medical Faculty—who were past masters at this new form of entrepreneurial medicine. Though such figures retained the rhetoric of anti-quackery, they showed a marked interest in utilizing the facilities of print culture and better integrated market conditions of the late eighteenth century for their own enrichment. Here, France looks much closer to the pattern of commercialized medical culture evolving in Georgian England than is sometimes supposed—and certainly closer than other European societies seem to have come.[66] By 1789 the old certainties and solidarities of the corporative medical community looked threadbare, and the community faced death from a thousand cuts across the institutional frontiers which formerly had segregated its three components from each other, and insulated them from the hurly-burly of the medical penumbra.

This subterranean shift taking place within the medical world was linked, as we have suggested, to a much broader range of developments, both intra- and extra-medical in character, and produced a variety of responses within a medical community increasingly perceiving itself to be in crisis. Three versions of change, we would suggest, three visions of medical organization, were in the air, which we may dub the 'corporatist', the 'statist', and the 'publicist'. A good number of physicians, first of all, thought that the only way forwards was ... backwards. These die-hard corporatists—often the individuals most heavily encysted within the upper reaches of the corporative community—urged that the traditional boundaries and hierarchy of the community be tightened up once more so that surgeons respected physicians as their betters, and that those untrained,

[64] See below, Ch. 10, Sect. B. The term 'Grub Street' has, for late 18th-cent. French society, been indelibly marked by the fine treatment of the phenomenon by Robert Darnton: see esp. his *The Literary Underground of the Old Regime* (Cambridge, Mass., 1982). For the broader, extra-Parisian perspective, see now E. Eisenstein, *Grub Street Abroad: Aspects of the French Cosmopolitan Press from the Age of Louis XIV to the French Revolution* (Oxford, 1992).

[65] See below, Ch. 10, Sect. C.

[66] Cf. Porter, *Health for Sale*, 21–2, 27 (contrasting open, entrepreneurial England with 'more highly regulated' France).

empirical doctors who now preened themselves as the equals of trained practitioners were brought back under the whip.

Amongst other medical practitioners, a more statist vision of medical organization emerged in response to the shifts within the medical world. This was an attempt to set new, more stable boundaries within a world in flux based less on corporative nostrums than on bureaucratic ideals. A driving force here was the perennial absolutist nostrum that the strength of the state lay in a large, healthy, and productive population. Over the century, the central government increasingly nurtured the idea of medical police—rational, state-directed administration of public health under the over-arching authority of the absolute monarchy—as a means of achieving these ends. This implied a different, more centralized and state-oriented version of medical hierarchy. The idea linked up in many respects with the models offered by the Enlightened Despots—and indeed it often exhibited a steely authoritarianism, particularly from the 1770s, as the arrival of Queen Marie-Antoinette opened channels of intellectual influence from Austria and gave indigenous notions of police a significant cameralist twist.

The locus of this new statist discourse tended to be the court, the armed forces, and civilian and military hospitals. The growth of salaried appointments in these domains over the century had reduced the specific weight of the leading corporative bodies at the core of the medical community. An ever-growing proportion of trained physicians, surgeons, and apothecaries were engaged wholly or in part in what might loosely be termed public rather than private practice in the service of the state. The emergence of the public practitioners—especially in the armed services—subverted the traditional corporatism of the medical community. Military medical practitioners were organized not corporatively, but hierarchically, under the war and navy ministries. Furthermore, when based in civilian life they generally claimed the right to practise privately, regardless of whether they belonged to the local corporation, simply by virtue of their public service. Surgeons too had a strongly centralized, state-backed structure, under the authority of the king's premier surgeon.[67]

Military medical personnel were also in the vanguard of a movement to introduce innovatory forms of practice into hospitals, thereby effecting a junction between state medicine and developing medical science. Whereas it was normal for a private practitioner to have a handful of patients whose progress was incessantly and closely monitored, military and hospital personnel in contrast developed a practice based on hundreds of patients, minimal intervention, and a handful of basic drugs. At the same time they often used their position and authority to combine practice with medical research. Hospitals provided novel opportunities to try out new remedies and find out more about

[67] See Gelfand, *Professionalizing Modern Medicine*, for these tendencies.

the internal ravages of disease through close bedside observation and, if need be, by dissection. They also allowed experimentation with forms of preventive medicine and statistical analysis which seemed to offer the possibility of improvements in environmental health decreasing general levels of morbidity. In the burgeoning campaign to avoid disease by policies of prevention and public health, medical police would offset the deficiencies of medical personnel.[68]

We should beware of making supporters of this equation of medical bureaucracy and clinical science sound too sinister, or too foreign to the traditions of Enlightenment France.[69] This new vision of medical organization and ideology—originating and developing within France's sizeable armed forces—reverberated, then spread as if by contamination within the core of the medical community, notably within the civilian hospital sector, and especially among surgeons. The potential of the hospital was prized as an empirically oriented centre for medical research and training, as well as the site for a new kind of medical practice. It also represented an opportunity for redefining the old division between the trained and the untrained, and between doctor and surgeon. The result was that by 1789, this alternative vision of health care, aided by state support, was developing alongside—but also within—the corporative community. Medical practitioners could imagine a future in which physical and mental ailments of all kinds had been conquered, and the population maintained at an optimum level of health through appropriate state action in public health, in a reformed hospital sector, and through prophylactic medical education.

Alongside the corporative model and the statist blueprint for how the medical world could and should react to the changing content and context of medical care was a third vision of the future which warmly embraced publicity and commercialism. A goodly sector of the corporative medical community were, as we have suggested, joining arms with those within the medical penumbra to respond to, and then to manipulate, the booming market for health services. This strand of medical thinking brought France close to the forms current in neighbouring England. A much freer market in medical services would release energies pent up by corporatist and mercantilist regulation. Any institution or individual which seemed to block the vivifying force of free exchange was criticized. For some, the critique extended to hospitals (whose health record, it had to be admitted, was very poor), and a campaign began to be mounted to produce better public health through the 'dehospitalization' of society. There was often a strongly political edge to the views of this publicist vision, as well as a strongly commercial flavour.

[68] See esp. Riley, *The Eighteenth-Century Campaign to Avoid Disease*.

[69] One does, however, note, on a comparative point, that Austria, home of Enlightened Despotism *par excellence* and originator of the idea of medical police, had numerous supporters of this new hospital-oriented, empiricist medical ideology. See O. Keel, 'Cabanis et la généalogie épistémologique de la médecine clinique', Ph.D. diss., McGill Univ., Canada, 1977.

It displayed a distrust for the state: state endorsement was alleged to give an edge in the market to inferior products and services and to favour corruption. In the last decade of the Ancien Régime, moreover, prompted by the medical *cause célèbre* of Franz-Anton Mesmer (1734–1815) and the mesmerist movement, it spread into a new cynicism about the claims of science to be regulated by archaic, die-hard institutions like the Paris Medical Faculty. If there was to be a regulator and tribunal for the claims of medical science to be adjudicated, it should be the public. Public opinion was as likely to give a guide to scientific veracity as the hidebound institutions of an Ancien Régime already perceived to be cracking up.[70] Well before the events of 1789 thrust the issues of university education, medical practice, hospitals, poor relief, and public health into the crucible of politics, they had been the centre of growing and heated debate.

D. Towards the Nineteenth Century

Our analysis of the decline and fall of medical corporatism in the eighteenth century has important consequences for how historians conceptualize the so-called birth of the clinic in the 1790s. Our account of the long-term origins of the emergence of modern medicine contrasts with existing accounts, accounts which variously take the form of a narrative framed in terms of the long-term rise of surgery (Gelfand), or which are based on short-term, sudden epistemic changes largely inexplicable through conventional conventions of causality (Foucault), or which stress the military exigencies of the 'nation in arms' in triggering change (Vess).[71] This is a subject which we treat more fully in this volume's Conclusion. Suffice it to note at this juncture, first, the degree to which the debates and decisions of the Revolutionary era relating to medical practice were patterned by the pre-Revolutionary developments, and, notably, the agendas for change then being mapped out which we outline; and, second, the extent to which the strains, tensions, and polemics of the Revolutionary era also contributed to the crystallization into a new medical system which would in its broad essentials last the whole of the nineteenth century and even beyond.

The upshot from the Revolution was that the time-honoured tripartite division of medical practice was reduced to two: doctors (both physicians and

[70] This discourse thus links up with the far broader notions of the public and of public opinion highlighted by Habermas, and carried further, for pre-Revolutionary France, by e.g. K. Baker, *Inventing the French Revolution: Essays on French Political Culture in the Eighteenth Century* (Cambridge, 1990), esp. ch. 8 ('Public Opinion as Political Invention'). For Mesmer, see below, Conclusion, Sects. A, B.

[71] In his *Medical Revolution in France, 1789–1796*, Vess argues that the war against Ancien Régime Europe precipitated Revolutionary France into 'medical revolution'. Gelfand's argument ultimately derives from the classic article of O. Temkin, 'The Role of Surgery in the Rise of Modern Medical Thought', *Bulletin of the History of Medicine*, 25 (1951), 248–60.

surgeons) and pharmacists. These two groups no longer operated within a heavily localist corporative community but in a nationwide, two-tiered professional structure. University-trained doctors and pharmacists lorded it over humbler, less theoretically trained health officers (*officiers de santé*) and second-rank pharmacists. The bureaucratized model of state police was unequivocally rejected, in favour of a more liberal model. But the latter was safely distant from the kind of total freedom which was tried out in the 1790s, when a free field in medical services had been instituted. The medical community had been subjected to a dose of neocorporatism, and emerged looking very much like a modern profession, with training based on a standardized hospital-oriented instruction, and with a legal monopoly on medical practice now endorsed by the state.[72] That profession, moreover, served as a blueprint for numerous other countries. The early modern French medical system may only have been a variant on a general European model. But the Revolutionary experience of medicine cast a long shadow into the nineteenth century. The system current in the nineteenth century became synonymous with medical professionalization in the modern world. For this reason alone, it is essential that historians have an understanding of how the model developed out of a specific eighteenth-century context.

We hope, however, that our account will be judged on its own terms and not merely seen as a prelude to, or prehistory of, modern medicine. Readers will easily see that our account throws out of kilter efforts to present an account of early medicine moving in unilinear fashion towards scientific medicine achieved through forces of 'professionalization'. Indeed, they will probably remark our consistent unwillingness—save only in the context of the French Revolution and its aftermath—to talk the language of 'professionals', 'professionalism', and 'professionalization'. We find the term 'medicalization' equally problematic, especially in the form in which it is currently used, as the medical dimension of some over-arching modernization process invariably figured as being engineered by the emergent state.[73] We self-consciously try to avoid these terms as a kind of intellectual hygiene and to steer our account clear of teleological theories of any stripe. Importing these processes—or at least what passes currently as these processes—into the early modern period can only be achieved, we hold, at the cost of considerable distortion. Our emphasis in this volume will be on, first, situating the corporative medical community at the centre of our analyses; second, on exploring the full range of practitioners within and on the margins of the community; and, third, endeavouring to place that community within the

[72] For the impact of the Revolution on medical education and training in general see Ramsey, *Professional and Popular Medicine*, and J. Goldstein, *Console and Classify: The French Psychiatric Profession in the Nineteenth Century* (Cambridge, 1987), esp. ch. 1.

[73] See esp. Geison (ed.), *Professions and the French State, 1700–1900*, and Jordanova, 'The Social Sciences and the History of Medicine', *passim*.

broadest institutional, social, economic, intellectual, and cultural contexts. This cuts against the grain of these overarching, but empirically and theoretically problematic, notions (as indeed it rejects even those examples of the new medical history which place the dichotomy between élite and popular culture at the heart of their accounts).

By deliberately complicating the analysis of the medical world in this way, we gain on both the empirical and the theoretical swings what we lose on the teleological roundabout. We provide materials which may be compared and contrasted not only across international boundaries, but also, within France, with the early modern corporative worlds of, for example, law, theology, or science.[74] Our work on the economics of health care also opens up a world of medical entrepreneurialism which historians have barely suspected, but which throws new light on relationships between what are too often characterized as the two distinct camps of the professional and, on the other hand, the commercial, or industrial bourgeoisie. Were we to retain the term 'medicalization' it seems as though it would be more appropriately associated with the growing demand for health services within the population as a whole than with narrowly politico-bureaucratic developments.[75] The breadth of our conceptual apparatus also allows us to embrace not only the commercialization of health and the development of a public health movement but also the growing politicization of the languages of the body in the late Enlightenment and the run-up to the French Revolution. Much of the most characteristic vocabulary of the Revolutionary era—the word 'revolution' itself, to say nothing of 'regime', 'constitution', 'crisis', 'degeneration', 'regeneration', 'convulsions', 'charlatans', and 'purge'—was the language of the morbid body—a body needing the attentions of the statesman-physician. In such diverse ways, we hope to establish the medical world close to the heart of historians' accounts of early modern society and culture.

[74] The world of law is attracting a good deal of attention at the moment, but the tendency, here and among similar professions is, to highlight only part of the legal world (e.g. M. P. Fitzsimmons, *The Parisian Order of Barristers and the French Revolution* (Cambridge, Mass., 1987)), to overplay the importance of the state, and conversely to underplay the impact of markets for services. For the world of law, see esp. D. A. Bell, *Lawyers and Citizens: The Making of a Political Elite in Old Regime France* (Oxford, 1994); and (an account closer to our own approach) S. Maza, *Private Lives and Public Affairs: The Causes Célèbres of Pre-Revolutionary France* (Berkeley & Los Angeles, 1993). We believe our emphasis on the importance of market forces in the 18th cent. could enrich parallel accounts. For scientists—again with an overemphasis on the role of the state—C. C. Gillispie, *Science and Polity in France at the End of the Old Regime* (Princeton, 1980). We could do with a book for France as ambitious and helpful as the essays in W. R. Prest (ed.), *The Professions in Early Modern England* (London, 1987).

[75] For an earlier attempt to situate medicalization as a phenomenon of demand rather than supply, see C. Jones, 'Montpellier Medical Students and the Medicalization of Eighteenth-Century France', in Porter and Wear (eds.), *Problems and Methods in the History of Medicine*.

PART I

Beneath the Shadow of the Plague

1

Death and Disease in French Society in the Sixteenth and Seventeenth Centuries

A. The Plague-Wracked Body

The man stricken with plague straight away feels his strength drained, his pulse disordered, his heart jumping, his stomach churning; he experiences continual vomiting and retching, a strange lack of appetite, an extreme fever; the insides, even the head, seem to be burning with the pain; while the external parts are all frozen, the lower belly is all swollen, the stomach tight. He is seized with anxiety and cannot sleep and yet is endlessly drowsy. His face changes completely, the eyes become red and wild, his temples are drawn, his nostrils enlarge, the end of his nose becomes pointed, the mouth, from which exudes a cadaverous odour, hangs half open, his tongue goes dry and black, his lips turn leaden. He is afflicted by great bouts of thirst, he finds breathing difficult, his skin becomes spotted with red, violet, and black pustules and marks and he is tortured by abcesses in several spots as his body becomes covered by buboes or painful tumours and other horrible symptoms.[1]

Historians endeavouring to reconstruct patterns of morbidity and mortality in early modern France are time and again brought face to face with bubonic plague, which cast a long and sombre shadow over all human endeavours and preoccupations.[2] We can be pretty sure that every adult in early modern France—and indeed in western Europe more generally—had at least one relative, friend, or neighbour who had died, in the spectacularly appalling and grotesque manner described above by Jacques Roland, at the hands of bubonic plague. Global levels of plague mortality in the sixteenth and seventeenth centuries never, it is true, reached those attained by the Black Death of 1348–52,

[1] Jacques Roland, *Antiloiminie, ou Contre-peste, œuvre chirurgicale qui traite des moyens de préserver et de guarir chacun de sa maladie pestilentielle* (Rouen, 1630), 16–18.

[2] The literature on plague is extensive but uneven. Demographic approaches start with J. N. Biraben, *Les Hommes et la peste en France et dans les pays européens et méditerranéens* (2 vols.; Paris, 1975–6). For social history, two recent syntheses are helpful: F. Hildesheimer, *La Terreur et la pitié: L'Ancien Régime à l'épreuve de la peste* (Paris, 1990); and M. Lucenet, *Les Grandes Pestes en France* (Paris, 1985). Our study is illuminated by the comparative angle provided by P. Slack, *The Impact of Plague in Tudor and Stuart England* (London, 1985). Useful too, for comparative purposes, is A. Carmichael, *Plague and the Poor in Renaissance Florence* (Cambridge, 1986).

when the plague had assumed an even more life-threatening, pneumonic form which caused the death of between a fifth and a third of Europe's population. The major waves of the disease were more widely spaced out as time went on: down to 1536 France experienced a major surge of plague mortality every eleven years, while from 1536 to 1670 these occurred only every fifteen years; Provence had forty-three years of plague in the century from 1451 to 1550 and twenty-nine from 1551 to 1650.[3] This tapering-off is unlikely, however, to have consoled contemporaries, who needed little demographic or statistical sophistication to remain appalled by the immensity of the biological toll the disease continued to exact. Each year from 1348 down to 1670 France was visited by this devastatingly aggressive scourge. Sometimes only a handful of localities were affected, while at other times—1585–6, 1596–7, 1628–30 for example—the disease assumed pandemic dimensions (Fig. 1*a*). The most spectacular hecatombs occurred in cities: Poitiers lost a third of its population in 1512–13; Angers, between a quarter and a third of its population of 25,000–30,000 in 1583–4; Lyons, 35,000 of its 70,000 in the epidemic of 1628–9; Metz, a fifth of its population of about 20,000 in 1636.[4] Between 1600 and 1670 plague was responsible for more deaths than any other disease, causing probably between 20 and 30 per cent of all urban mortality. Over the same period, while France's population wavered between 18 and 20 millions, the diseases caused between 2 and

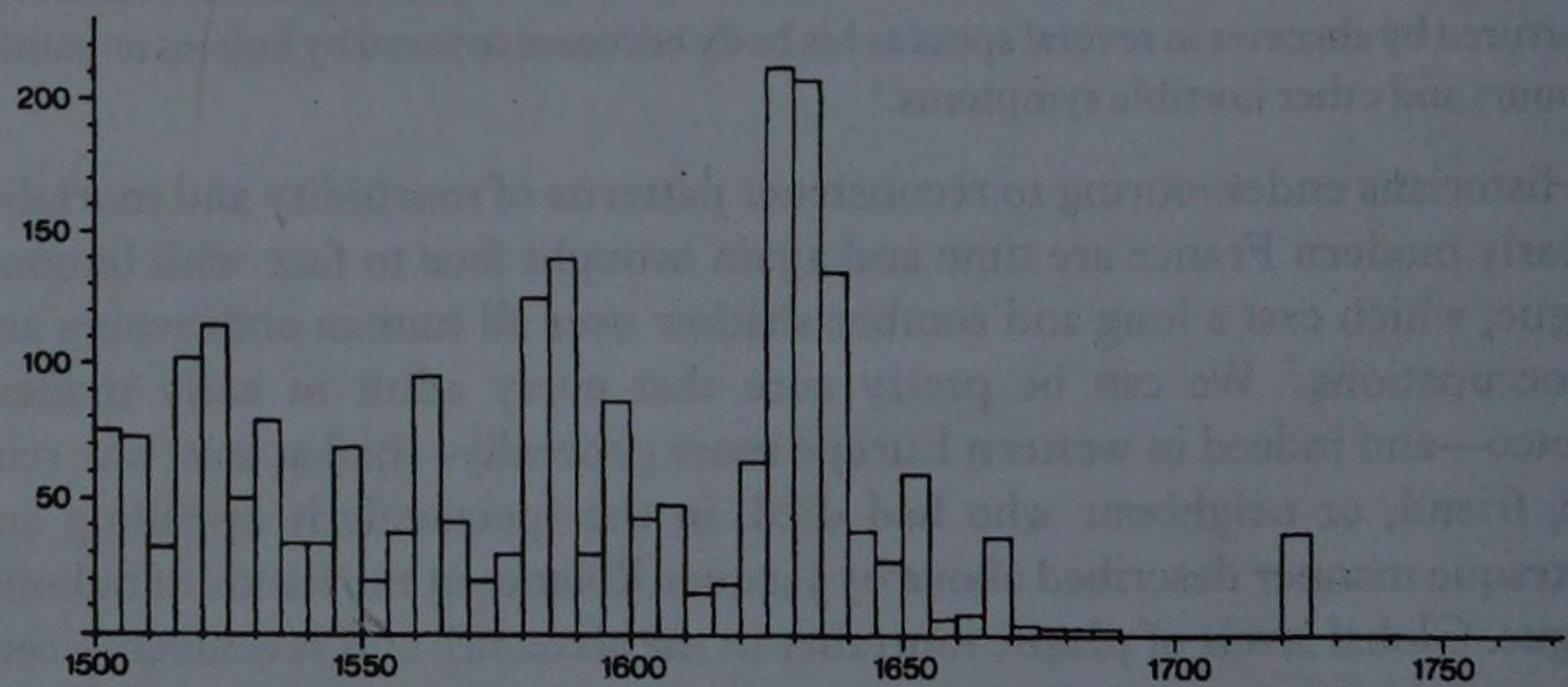


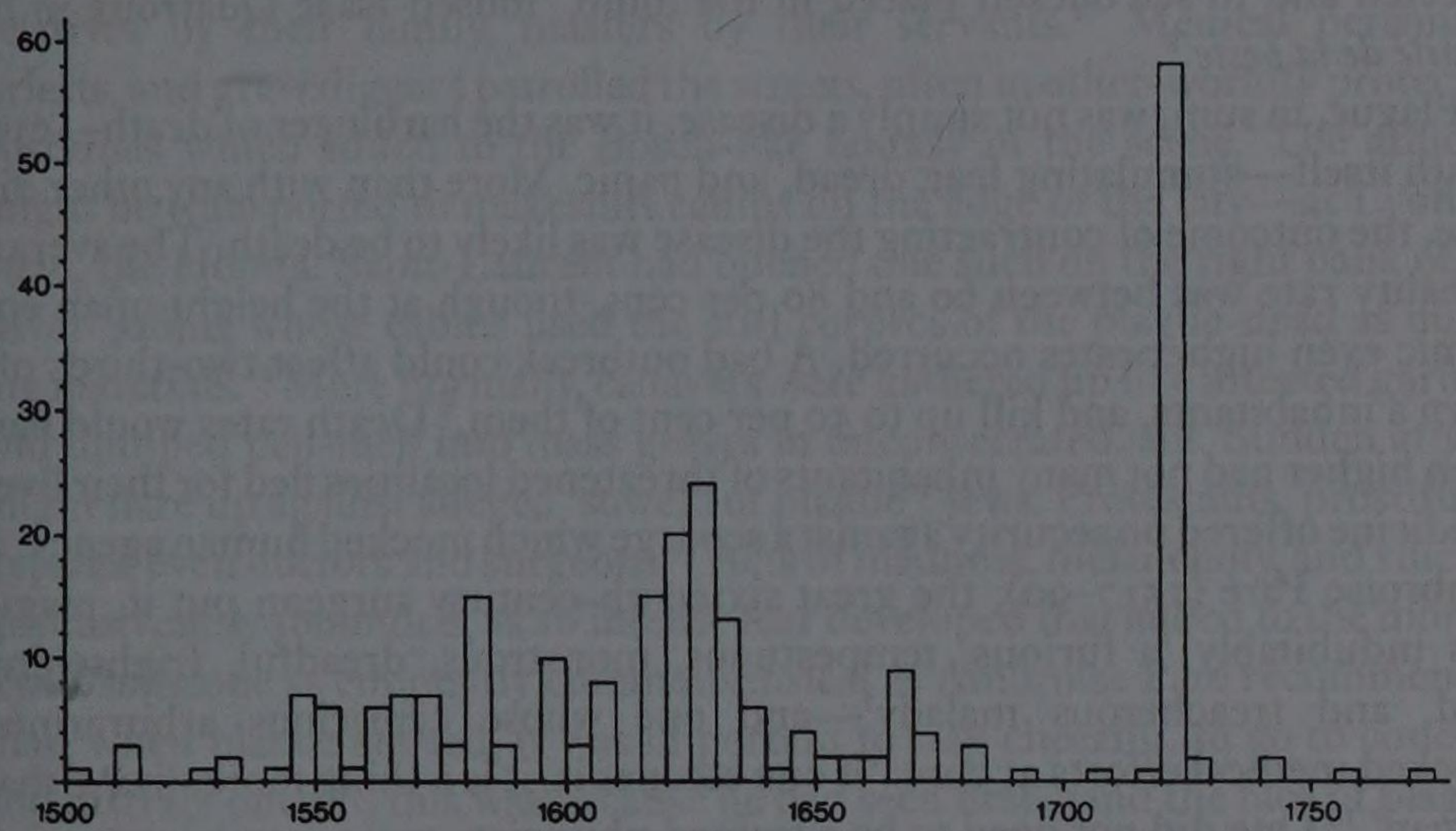
FIGURE 1*a*. Plague: incidence and discourses

(i) Number of localities in France affected by the plague, 1500–1722

Source: J. N. Biraben, *Les Hommes et la peste en France et dans les pays européens et méditerranéens* (2 vols.; Paris, 1975–6), i. 120.

[3] Biraben, *Les Hommes et la peste*, i. 125; D. Panzac, *Quarantaines et lazarets: L'Europe de la peste d'Orient (XVIIe–XXe siècles)* (Aix-en-Provence, 1986), 11.

[4] Lucenet, *Grandes Pestes*, 149 f.; Biraben, *Les Hommes et la peste*, i. 308; F. Lebrun, 'Les Crises démographiques en France aux XVIIe et XVIIIe siècles', *Annales ESC* 35 (1980), 209.



(ii) Number of French plague tracts, 1500–1770

Source: C. Jones, 'Plague and its Metaphors in Early Modern France', *Representations*, 53 (1996).

3.5 million deaths in France as a whole. Indeed, the surge of 1628–31 alone caused between 750,000 and 1,150,000 deaths.[5]

The lethal aspect of the disease, as well as the appalling suffering and damage it provoked in the plague-wracked body, was terrifying. It killed horribly—and horribly quickly: in Rennes in 1605, 20 per cent of those affected died within 24 hours, 43 per cent within 48 hours, and 80 per cent within 5 days.[6] The plague, it would seem, was no respecter of persons, striking down the healthy alongside the ailing, the adult alongside the child, the robust alongside the frail, and, as one plague tract recorded, 'delight[ing] in showing its power by attacking even the strongest so as to prove that nothing can resist it'.[7] Its hectic course seemed not only to carry off the lives of the stricken but also to efface their very individuality, to blot out their identity. The boundedness of the body exploded into a polychromatic cascade of morbid body fluids and weeping buboes. It was as if the disease wished to leave no time for the stricken to be sick: morbidity was eclipsed by the headlong rush towards a fatal termination of life: 'its poison is so rapid, and slips so subtly into the body, that it is one and the same to feel oneself

[5] Biraben, *Les Hommes et la peste*, i. 308.

[6] A. Croix, *La Bretagne aux XVIe et XVIIe siècles: La Vie, la mort, la foi* (2 vols.; Paris, 1981), 468. This outstanding monograph contains a great deal of information relevant to the present chapter.

[7] Jacob Girard des Bergeries, *Le Gouvernement de la santé* (Geneva, 1662), cited in A. Wear, 'Popularized Ideas of Health and Illness in Seventeenth-Century France', *Seventeenth-Century French Studies*, 8 (1986), 239.

affected and to see oneself placed in the tomb,' mused Isaac Quatroux in his *Traité de la peste*.[8]

Plague, in sum, was not simply a disease, it was the harbinger of death—even death itself—stimulating fear, dread, and panic. More than with any other disease, the outcome of contracting the disease was likely to be death. The average lethality rate was between 60 and 80 per cent, though at the height of an epidemic even higher rates occurred. A bad outbreak could affect two-thirds of a town's inhabitants, and kill up to 50 per cent of them.[9] Death rates would have been higher had not many inhabitants of threatened localities fled for their lives. Medicine offered no security against a scourge which mocked human agency: as Ambroise Paré (1517–90), the great sixteenth-century surgeon put it, plague was indubitably 'a furious, tempestuous, monstrous, dreadful, frightening, wild, and treacherous malady'—and one whose capricious arbitrariness brooked medical efforts at cure: 'if one escapes it, it is a thing more divine than human'.[10] One did not need to be a trained physician, moreover, to appreciate that the best medicine against plague was a medicine of avoidance: 'leave early', the recommendation went, 'go far, come back late'. Even Galen, the father of medicine, was renowned for having fled a plague outbreak—and physicians were nothing, as we shall see, if not faithful Galenists.[11]

The approach of plague marked the advent of anxiety. When rumours of plague were in the air, sane men and women scanned the skies for comets and heavenly signs; they pored over astrological charts for significant conjunctions; they strained ears against the ground for subterranean rumblings and portents; they probed travellers for tales of cataclysms and prodigies; they sifted through tales of blights of locusts, worms, and grasshoppers; they stealthily sniffed the air for the coming stench of death.[12] The aroma of plague derived from a medical constitution which favoured the spread of the disease and the gut-churningly malodorous smell of rotting corpses. In the twinkling of an eye, plague turned the quick into the dead. Plague treatises recounted a dismal chronicle of disruption and distress: the plague-stricken town was like a gruesome pastiche of hell, where the visible and olfactory superabundance of rotting human flesh signalled the sundering of normal bonds of sociability. Trade stopped; streets emptied; empty houses were looted; and in a generalized atmosphere of *sauve-qui-peut*, children were abandoned by their parents, aged

[8] Isaac Quatroux, *Traité de la peste* (Paris, 1671), 2. [9] Slack, *Impact of Plague*, 7.

[10] Ambroise Paré, 'Livre traictant de la peste', in id., *Œuvres* (10th edn., Lyons, 1641), 526, 542 (1st pub., Paris, 1561).

[11] Cf. J. N. Biraben, 'Les Pauvres et la peste', in M. Mollat (ed.), *Études sur l'histoire de la pauvreté* (2 vols., Paris, 1974), ii. 508. For Galenism, see below, Ch. 2, esp. Sect. C.

[12] Biraben, *Hommes et la peste*, i. 130 ff., ii. 9 ff. Cf. R. Cobb, *The Police and the People: Popular Protest in France, 1780–1820* (Oxford, 1970), 323–4 (concerning dearth, but equally evocative of apprehensions caused by epidemic disease).

relatives by their family, masters by their servants.[13] Medical personnel, priests, and gravediggers patrolled the streets, often in other-worldly protective costumes which added to the Bosch-like fantasy of the scene. The afflicted might be transported to makeshift camps on the edge of the city—at Lyons in 1628, the Hôpital Saint-Laurent had opened one such on the right bank of the River Saône, whose cabins used the stiff corpses of the plague-dead as building materials.[14] More normally, cadavers were gathered up like infected garbage and dumped pell-mell into mass graves in unconsecrated soil. Sudden attacks might flare up against alleged 'sowers of plague': Jews, Protestants, prostitutes, gypsies, even doctors and surgeons.[15] Acts of madness, melancholy, and suicidal impulsiveness abounded, as an intense fear developed that added to the mortality. If someone as eminently commonsensical as Ambroise Paré recommended that, when plague started, it was important to stay cheerful, to go to concerts and distract oneself, this was because he had seen first-hand the face of plague-induced panic, because he knew that stout-heartedness and a belief in the ineffability of divine grace helped people cling onto sanity and bodily equilibrium in a community living through the purgatory that was a plague attack.[16]

The fact that the word for plague, *peste*, came to be attributed to any extreme form of pestilence, epidemiological disaster, noxious prodigy, or human catastrophe was ample testimony to the spectacularly corrosive action plague had on the human body, on the body social, and on the collective imagination in early modern France.[17] No other disease was so widely discussed in medical writings: there were nearly 300 plague tracts written in Europe by 1500, and nearly as many again in France alone over the next two and a half centuries (see Fig. 1*a*).[18] Contemporaries' ignorance of the aetiology of the disease inevitably affects, however, the exactness with which its social profile may be delineated; it was not until 1894 that Yersin isolated the plague bacillus (*Yersinia pestis*), and that the plague's transmission on the flea (*Xenopsylla cheopis*) of the black rat (*rattus*

[13] These are leitmotifs in countless plague treatises: e.g. Quatroux, *Traité sur la peste*, 2. For an analysis of the thematics of plague tracts, see C. Jones, 'Plague and its Metaphors in Early Modern France', *Representations*, 53 (1996), 97–127. The horror of the breakdown of order was not necessarily as emphatic as the texts suggests, however: Slack notes examples of the continuation of 'civilized' behaviour: *Impact of Plague*, esp. 240.

[14] *Journal d'un Lyonnais au XVIIe siècle*, ed. A. Champdor (Lyons, 1984), 72.

[15] Biraben, *Hommes et la peste*, ii. 22–5; Croix, *Bretagne*, 461–2, 479–82. Cf. R. Baehrel, 'Épidémie et terreur: Histoire et sociologie', *Annales historiques de la Révolution française*, 23 (1951), 113–46.

[16] Paré, *Œuvres*, 832.

[17] A. M. Brenot, 'La Peste noire des Huguenots: Étude d'une logique d'exécration au XVIe siècle', *Histoire économie et société*, 11 (1992).

[18] For the period until 1500, K. Sudhoff, 'Pestschriften auf den ersten 150 Jahren nach der Epidemie des "Schwartzen Todes", 1348', *Archiv für Geschichte der Medizin*, 2–17 (1909–25); and for the period from 1500 to 1770, C. Jones, 'Plague and its Metaphors'.

ILLUSTRATION 1. Protective costume in time of plague. This costume for medical men was allegedly invented by royal physician Charles Delorme in 1619, and was still in use in the Marseilles plague of 1720. Aromatic herbs were placed in the 'beak' to mask the stench of disease.

rattus) became apparent; more recently, epidemiologists have argued that the human flea (*pulex irritans*) may also bear the micro-organism in some circumstances. The languages which contemporaries used to talk about the disease and to invest it with meaning lack clinical precision, and consequently make any calculus of suffering bodies highly speculative. The horror of the disease, to which plague texts furnish ample proof, so dominated imaginations that during an epi-

demic there was almost certainly some overregistration of deaths caused by *Yersinia pestis*. Medical men had a good appreciation of the symptoms of the disease, but deaths on the ground were usually recorded by medically unqualified searchers and gravediggers in circumstances of great confusion and distress. Thus any sudden death or slightly uncertain malady during a plague outbreak might be attributed to the disease: a chronicler at Agen stated that one only had to have a slight fever to be buried as a plague victim; all members of a household in which plague was declared would similarly be accounted plague-victims, as would all children (since children's more fragile nature was thought to be more susceptible to contagion) and all inmates of hospitals and lazarettos; there were cases too of sick individuals being sewn screaming into their shrouds before being carted off to the plague pits.[19] Furthermore, the fact that plague disrupted economic activity meant that an infected community might catch the diseases of hunger and inanition,[20] even though these too were all marked down on the plague body-count. When confronted with plague, one could think of little else.

B. Plague and the Pathosystem

Just as death from plague tends to eclipse the experience of the disease as a morbid state, so the disease could obscure from contemporaries—as it still often hides from historians—the presence of a host of other life-threatening diseases. Plague, whose dramatic penetration into the body and the body social we have evoked, was only the most visible of a wide range of infectious diseases which made up the epidemiological landscape of early modern France (see Table 1*a*). The plague bacillus had lain endemic within the rodent burrows of central Asia for centuries, shifting into western Europe in the mid-fourteenth century as a result of Genoan traders penetrating the area. The fleas on the shipboard rats on which *Yersinia pestis* took up residence in 1347–8 and which entered the indigenous disease-pool of western Europe with such devastating effect, formed the advance-guard of waves of microbes which swept around the world, breaking down disease ecologies of isolated areas and producing a more homogenized world of disease.[21]

[19] Lucenet, *Grandes Pestes*, 161–2 (for Agen); J. J. Hémardinquer, 'L' "Essai de peste" au XVIIe siècle', *Revue d'histoire moderne et contemporaine*, 23 (1976), 278–90. Cf. Raymond Besard, *Discours de la peste* (Dôle, 1630), 31; and A. Carmichael, 'Contagion Theory and Contagion Practice in Fifteenth-Century Milan', *Renaissance Quarterly*, 44 (1991), 231.

[20] See below, Sect. C.

[21] For this process, see esp. W. H. McNeill, *Plagues and Peoples* (London, 1976); A. W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (Cambridge, 1986), 119–34; id., 'Infectious Disease and the Demography of the Atlantic Peoples', *Journal of World History*, 2 (1991); and E. Le Roy Ladurie, 'A Concept: The Unification of the Globe by Disease (Fourteenth to Seventeenth Centuries)', in id., *The Mind and Method of the Historian* (Brighton, 1981).

TABLE 1*a*. *The pathosystem of early modern France: the main infectious diseases*[a]

Disease	Mode of transmission	Groups most at risk	Link with nutrition	Clinical course of illness	Survival rate (%)
Leprosy[b]	Prolonged contact	all	yes	life	nil
Plague[c]	Rat (and possibly human) flea	all	no	4 weeks+	20–40
Typhus[d]	Flea-borne	?all	uncertain/ variable	1–8 weeks	uncertain
Malaria	Mosquito-borne	?all	no	spasmodic	high
Syphilis[e]	Venereal contact	adults; nurslings	uncertain/ variable	prolonged	high
Dysentery	Contaminated food, water	1–4-year-olds; adults	no	1 week	75–99
Typhoid fever	Contaminated food, water	esp. under 30-year-olds	no	1–8 weeks	up to 90+
Smallpox	Airborne contagion	esp. 1–4-year-olds	no	3–4 weeks	80–5
Influenza	Airborne contagion	children and adults	uncertain/ variable	1–3 weeks	90–9
Tuberculosis	Airborne contagion	infants, young adults	yes	prolonged	uncertain

[a] Not included: diarrhoeas and most diseases of infancy, chronic illnesses, etc.
[b] Dying out, 14th–17th cents.
[c] Current until *c*.1670; only later episode, 1720–2
[d] First recorded case, 1477
[e] Appearance in France, mid-1490s; high mortality down to 1530s

Sources: Adapted from J. C. Riley, *Sickness, Recovery and Death: A History and Forecast of Ill Health* (London, 1989); *Hunger and History*, special no., *Journal of Interdisciplinary History* (1983).

Europe developed a common market in disease in the sixteenth century. Existing economic frameworks were burst asunder by economic expansion and new global power systems. France benefited from its contiguity to the powerhouses of the European economy in the Low Countries and north Italy. Its agricultural riches and its fast-growing manufacturing sector—along with its expanding population—provided the basis for much denser trading networks. In the resultant breakdown of localist barriers to exchange, blocks on the exchange of microbes fell too. Commercial and cultural exchange thus acted as

conduits for the diffusion onto a wider stage of what had been local diseases.[22] The 'microbial unification of the world', a footnote to the emergence of a global economic system, tended to favour Europeans. The rich epidemiological landscapes of the Levant had proved a formidable check against Crusader ambitions in the Near East, but the Americas, opened up by another Genoan, Christopher Columbus, offered a more welcoming terrain. The isolation of indigenous populations from the remainder of humanity had been so complete that their immune systems proved powerless to resist the ravages of European diseases. In the American setting, measles, smallpox, and other maladies instigated virgin-soil epidemics which reduced population levels in the course of the sixteenth century by staggering amounts. This microbial holocaust immeasurably assisted Europe's 'civilizing mission'.

The 'Columbus exchange' was moreover an unequal one. Syphilis, which seems to have crossed the Atlantic with Columbus's sailors, was probably the only disease with clearly American roots to strike Europe as a virgin-soil epidemic.[23] It was present in Spain in early 1495, and had been contracted by the motley crew of Frenchmen, Spaniards, Italians, Swiss, Gascons, and Flemings who composed the French army of Charles VIII (reigned 1483–98) in Naples later that year. It rapidly made its presence felt throughout the European continent. Although down to perhaps 1530 syphilis was a killer disease, despatching its victims two or three years after it had been contracted with a wondrously colourful and florid array of symptoms (genital chancres, boils, proliferating pustules, etc.), it soon settled down to the level of socio-sexual inconvenience rather than demographic scourge. The impact of syphilis was moreover lessened by the fact that the early virulence of the disease combined with the move to reform sexual behaviour associated with the Reformation and Counter-Reformation to produce remarkable reductions in extramarital sexual activity. By the late seventeenth century national illegitimacy figures were only about 1 per cent (even lower in most rural areas), while pre-nuptial conceptions were also very few—less than 5 per cent in north-western France, for example.[24] Syphilis became more significant as a stimulant to moralistic and medical

[22] For the economic history of early modern France, see the overviews provided in F. Braudel and E. Labrousse (eds.), *Histoire économique et sociale de la France*, i. *1450–1660* (2 pts.; Paris, 1977), and ii. *1660–1789* (Paris, 1970); and P. Léon (ed.), *Histoire économique et sociale du monde*, i. *XVe–XVIe siècles* (Paris, 1977), and ii. *1580–1730* (Paris, 1978).

[23] The phrase seems hardly apt. C. Quétel, *History of Syphilis* (Oxford, 1990) is the most up-to-date coverage of the disease, though it leaves a great deal to be desired for most of the period under review. See too A. Foa, 'The New and the Old: The Spread of Syphilis (1494–1530)', in E. Muir and G. Ruggiero (eds.), *Sex and Gender in Historical Perspective* (Baltimore, 1990).

[24] J. Dupâquier (ed.), *Histoire de la population française*, ii. *De la Renaissance à 1789* (Paris, 1988), 313. See too M. Flinn, *The European Demographic System, 1500–1800* (Brighton, 1981), esp. 118–21. This was in a context in which contraception was not being systematically practised.

discourse—the eighteenth-century historian of the disease Jean Astruc (1684–1766) was to cite six hundred authors[25]—than as a mass killer.

Contemporaries puzzled ceaselessly over whether syphilis was a totally new disease—quite a major admission in a mental landscape so dominated, as we shall see, by respect for traditional authorities. Similar mental wrestling took place over other diseases too, though the nosological picture is sufficiently confused to leave a great deal of uncertainty for the present-day retrospective diagnostician. Among the most curious of the so-called new [illegible] the 'English sweats', which appeared across the Channel in 1485 [illegible] the margins of France (Calais in 1518 and the Strasburg area [illegible] disappearing as mysteriously as it had appeared—only to [illegible], in the eighteenth century. This and the so-called *trous*[illegible]nt in France in 1528 and then again in 1545–6 and charact[illegible]fevers along with migraine and delirium, may have been strains o[illegible]enza. The latter was increasingly apparent too, killing few but causing distress to many. There was a major pan-European epidemic of the disease in 1580.[26]

Typhus—in association with typhoid fever, with which it was indissolubly linked by doctors down to the nineteenth century—was another 'new disease'. It was first recorded in 1477, when Venetian soldiers appear to have [illegible] from Turkish prisoners-of-war, and made erratic app[illegible] sixteenth century: in 1528 it decimated a French ar[illegible] example, while in 1557 there were outbreaks in Bord[illegible] Angoulême, and in 1566 it reached Paris. Physicians puzzled too ov[illegible] 'the plague of the sea' (though it occurred on land too)—wh[illegible] larly associated with poor diet on the voyages of discovery; 100 of the 110 followers of the French explorer Jacques Cartier contracted the disease in Canada in 1535.[27] Whooping cough and smallpox, both primarily children's afflictions, and both inflicting ferocious damage, were also, some argued, new diseases too. A whooping cough epidemic in Paris in 1510 brought comparisons with the plague, and victims were isolated in their homes, showing a straw boot in their window as a sign of infection. Smallpox was deadlier still. It developed into the second-biggest killer disease (after plague). Successive generations of children were decimated by the epidemic: average lethality rates between 15

[25] *De Morbis venereis libri sex* (Paris, 1736).

[26] Dupâquier (ed.), *Histoire de la population*, ii. 245 ff. for all 'new diseases'. Cf. L. G. Stevenson, ' "New Diseases" in the Seventeenth Century', *Bulletin of the History of Medicine*, 39 (1965), 1–21; V. Nutton, 'Pieter van Foreest and the Plagues of Europe: Some Observations on the *Observationes*', in H. L. Houtzager (ed.), *Pieter van Foreest: Een Hollands medicus in de zestiende eeuw* (Amsterdam, 1989); and F. Lebrun, *Se Soigner autrefois: Médecins, saints et sorciers aux XVIIe et XVIIIe siècles* (Paris, 1983), 168 ff.

[27] To the general works cited above, add K. J. Carpenter, *The History of Scurvy and Vitamin C* (Cambridge, 1986).

and 20 per cent were common and in some cases nearly the whole of a village's children could be affected, causing deaths of between a quarter and a third of a cohort.[28]

Smallpox was one of the diseases most responsible for the immense human destruction which disease inflicted on the indigenous peoples of the Americas. Despite its capacity for demographic damage, however, it never settled permanently in the New World, since it required higher population densities than could be found there. It could become naturalized and endemic in towns of about 7,000. There might have been precious few of these in America, but the fifty-odd such centres to be found in sixteenth- and seventeenth-century France represented a heavier urban concentration than in any other European state.[29] Paris was in 1600 the largest city west of Constantinople—it grew in size from 220 to 450 thousands between 1600 and 1650—and the urban population overall had risen to about 15 per cent of the total population by 1600, and to over 17 per cent by 1650.[30] This level of urban crowding constituted a favourable terrain for micro-organisms to prosper.

Under the influence of an expanding economy, urban growth, and more intense levels of exchange, a new urban ecology emerged in the sixteenth century in which diseases both old and new prospered. The crowding-in of large numbers of the poor within towns which already constituted, in many cases, a favourable terrain for the spread of disease produced an urban environment which was a considerable threat to health. Many of the constituents of early modern France's pathosystem—its ensemble of pathological conditions[31]—derived from a polluted environment: unwashed hands and bodies, stagnant puddles, steaming marshes, noxious cesspits, filth-strewn streets and alleys, and the like. The often impoverished newcomers to France's towns and cities had to habituate themselves to a life of squalor. Although there was some new building, this failed to keep pace with urban immigration, so that population density within individual dwellings rose sharply. A barely furnished individual room in a tall, poorly lit, and poorly ventilated wooden tenement was sole dwelling for numerous families, who were ill protected from the elements—glass windows were still the preserve of the upper classes and most dwellings had only oiled

[28] Besides the works cited above, see D. R. Hopkins, *Princes and Peasants: Smallpox in History* (Chicago, 1983); A. Mercer, *Disease, Mortality and Population in Transition: Epidemiological-Demographic Change since the Eighteenth Century as Part of a Global Phenomenon* (Leicester, 1990), esp. 46 ff.; and V. J. Knapp, *Disease and its Impact on Modern European History* (Lampeter, 1989), 77 ff. For whooping cough and the straw boot, see H. Brabant, *Médecins, malades et maladies de la Renaissance* (Brussels, 1966), 64–5.

[29] See the listing of towns and town sizes in P. Benedict (ed.), *Cities and Social Change in Early Modern France* (London, 1989), 24–5. Cf. Mercer, *Disease, Mortality and Population*, 23; and Crosby, *Ecological Imperialism*, 283–4.

[30] Dupâquier, *Histoire de la population*, 87, 94.

[31] See above, Introduction.

paper and heavy shutters to keep out the elements—while heating was rudimentary and often non-existent.[32]

Water supply in towns was poor—far worse than that which had been enjoyed by the Romans—and problems of sanitation acute.[33] Private privies were few—sometimes one per tenement, with the result that the chamberpot, and thence the window, were the usual destination for urine and faeces. In Périgueux, it was stated that the emptying of chamberpots had to stop each day when the Angelus rang[34]—but this was little protection for the passing pedestrian against aerial assault. Gutters, where they existed, were poorly maintained—an enquiry in Paris in 1638 revealed most public sewers blocked up, stinking, and overflowing with effluent and industrial waste. Indeed the Paris mud was famous—'black, stinking, with a stench strangers find intolerable', the antiquarian Sauval noted at about the same time: 'it stings and can be smelt 3 or 4 leagues outside Paris'.[35] Street-cleaning measures had been introduced in many towns in the fourteenth and fifteenth centuries, but they left a good deal to private initiative and were poorly enforced. Outside Paris, the streets of many towns were swept only in times of epidemics and at the arrival of royalty. Stagnant water and domestic waste lay around the streets in stinking pools and marshy mudbowls into which ran all kinds of industrial effluent, which then percolated into the streams, rivers, and wells which formed townspeople's drinking-water. Consumers drew their drinking-water from the same sources in which animals drank, washerwomen scrubbed and soaped, and butchers, slaughtermen, tanners, and barbers dumped their waste.

In some respects, moreover, there was probably regression since the Middle Ages. Bathhouses had been an integral part of the medieval urban landscape, yet were almost wholly eradicated in the course of the sixteenth century. Partly this was as a result of religico-moral attack: the festive sociability and mingling of bodies which took place within them was increasingly questioned, especially as many establishments had doubled as brothels, which were themselves under attack by Reformers and Counter-Reformers alike. Medical reasoning but-

[32] For general coverage of urban living conditions, see esp. the sect. of *Annales de démographie historique* (1975) devoted to 'Démographie historique et environnement'; Croix, *Bretagne*, 781 ff., 800 ff.; Lebrun, *Médecins, saints et sorciers*, 146 ff.; and id., *Les Hommes et la mort en Anjou aux XVIIe et XVIIIe siècles: Essai de démographie et de psychologie historiques* (Paris, 1971), 261 ff.

[33] Additional gleanings on problems of water supply in J. C. Bologne, *Histoire de la pudeur* (Paris, 1986); G. Vigarello, *Concepts of Cleanliness: Changing Attitudes in France since the Middle Ages*, Eng. trans. (Cambridge, 1988); A. Franklin, *La Vie privée d'autrefois: L'Hygiène* (Paris, 1890); D. Laporte, *Histoire de la merde (Prologue)* (Paris, 1978); and Croix, *Bretagne*, 796 ff.

[34] A. Higounet-Nadal, 'Hygiène, salubrité publique, pollution au Moyen Âge: L'Exemple de Périgueux', *Annales de démographie historique* (1975), 86.

[35] Cited in Franklin, *Hygiène*, 106 ff., 131. For Parisian living conditions generally, see too J. P. Babelon, *Paris au XVIe siècle* (Paris, 1986), esp. 171 ff., 263 ff.; and L. Bernard, *The Emerging City: Paris in the Age of Louis XIV* (Durham, NC, 1970), esp. chs. 1, 8.

tressed this critique: the opening of pores allowed ingress, it was held, to epidemic diseases, plague and syphilis not least. Erasmus in 1526 lamented the disappearance over the previous three decades of bathhouses which, he held, 'the new plague [i.e. syphilis] [had] made us do without'.[36] New criteria of sexual modesty—closely linked to Reformation and Counter-Reformation moralizing—also appear to have acted as disincentives to personal cleanliness based on washing. Personal cleaning, by wiping rather than washing, concentrated on the visible (clothes, linen, faces, hands) leaving more ignoble parts suitably veiled, while body smells were more likely to be combated by perfumes rather than by bathing. A greater sense of bodily containment and boundedness emerged, particularly in books of manners from the Renaissance onwards, although these did not exhibit overmuch anxiety about body-washing. Dirt, moreover, had its enthusiasts, as it was commonly seen as providing a protective layer helping to ward off the penetrative aggression of disease: 'people who bathe', it was sagely noted, 'don't live long'.[37]

The social environment was thus a more-than-favourable terrain for collective infection. The problems of disease were inextricably connected to the quotidian realities of dirt. Urban overcrowding was so intense that cemeteries were often the only public spaces available for recreation.[38] The remains of the dead were visually present here—bones were formed into macabre ossuary arrangements—and their odour hovered too. Graves were shallow—dogs had to be shooed away from digging up partially visible bones—and tombs often gave off a malodorous stench. Curiously, in most cities, the cemetery provided a place for merchants to trade, for strollers to promenade and chat, for prostitutes, beggars, and pickpockets to do their business. The famous Cemetery of the Innocents in Paris housed a commercial arcade, while the cemetery in Vitré in Brittany contained a bar.[39] The casualness of relations between the dead and the living could not obscure a manifest threat to public health.

If conditions in the early modern town were grim, the countryside was no rural arcadia. Density levels were less acute, but living conditions were probably

[36] Cited in Vigarello, *Concepts of Cleanliness*, 27. For the closure of brothels and bathhouses, see J. Roussiaud, *Medieval Prostitution* (Oxford, 1988); and E. M. Bénabou, *La Prostitution et la police des mœurs aux XVIIIe siècle* (Paris, 1987).

[37] 'Gens de bains, gens peu d'années': cited in Lebrun, *Médecins, saints et sorciers*, 145. On the valorization of dirt, see F. Loux and M. F. Morel, 'L'Enfance et les savoirs sur le corps: Pratiques médicales et pratiques populaires dans la France traditionnelle', *Ethnologie française*, 6 (1976), 314; and J. Léonard, *Archives du corps: La Santé au XIXe siècle* (Paris, 1986), 117. The works of Vigarello and Bologne are esp. useful on these general developments. For the transformation of manners, the key text remains the classic N. Elias, *The Civilizing Process:* i. *The History of Manners*, Eng. trans. (New York, 1978).

[38] On cemeteries, see P. Ariès, *The Hour of Our Death* (London, 1983), esp. 41 ff.; M. Vovelle, *La Mort et l'Occident de 1300 à nos jours* (Paris, 1983); Croix, *Bretagne*, 1095 ff.

[39] Ariès, *Hour of Our Death*, 69; Croix, *Bretagne*, 1098.

no better, and peasants were exposed to as polluted and inclement an environment as town-dwellers. Close propinquity to animals and livestock, with whom country-dwellers often shared their living and sleeping space, counted for something in this. A good number of human maladies were related to and influenced by animal diseases. Cowpox and smallpox constituted a case in point as, probably, did horse rhinoviruses and the virus for the human cold, while a common virus seems to have ended up producing distemper (for dogs), rinderpest (for cattle), and measles (for humans).[40] Other life-forms displayed a similarly insouciant commensalism with their human hosts. The presence of rats was widespread and banal—indeed so banal that no one thought to connect the outbreak of bubonic plague with the comings and goings of the rat population.[41] The mosquitoes which flourished on polluted and stagnating waters carried malaria, a disease which was firmly established in low-lying and marshy areas like the Saintonge, the Dombes, the Landes, the Camargue, and the Bas-Languedoc coasts, where travellers recorded peasants lying languorously around, incapable of even moderately strenuous effort.[42] Human lice and fleas also happily acted as conduits for disease—possibly plague, certainly dysentery, for example. Loss of life through the latter was at times very high indeed: major epidemics in western France in 1540, 1607, and in particular in 1639 sent village deaths soaring between five and ten times their normal levels.[43] Micro-organisms abundant in polluted water channelled typhus and typhoid fever, those in polluted milk, tuberculosis.

Such intense exposure to a variety of channels of disease diffusion was particularly significant in that Europe's climate seems to have been changing for the worse over the sixteenth century.[44] From about 1560 Alpine glaciers were inexorably on the move, spreading out to gobble up villages and outdwellings, as Europe entered the 'Little Ice Age' which was to last down to the end of the nineteenth century. Contemporaries may not have perceived the change, which was gradual and limited in some respects—average temperature levels dropped by only 1 degree centigrade—but they lived with and had to make the best of a steady tendency towards colder and wetter winters, and wilder oscillations in weather. Icebergs periodically floated out in the Mediterranean, and vine- and

[40] Crosby, *Ecological Imperialism*, 31 ff.; McNeill, *Plagues and Peoples*, 51–2. Still a good, if gruesome, read is H. Zinsser, *Rats, Lice and History* (New York, 1935; and numerous repr.).

[41] Biraben, *Hommes et la peste*, ii. 25.

[42] Lebrun, *Médecins, saints et sorciers*, 169; P. L. Thillaud, *Les Maladies et la médecine en pays Basque à la fin de l'Ancien Régime (1690–1789)* (Geneva, 1983); and E. Le Roy Ladurie, *Les Paysans de Languedoc* (Paris, 1966), 552.

[43] F. Lebrun, 'Les Crises démographiques en France aux XVIIe et XVIIIe siècles', *Annales ESC* 35 (1980), 210; Lebrun, *Hommes et la mort*, 329 ff.; Croix, *Bretagne*, 454.

[44] E. Le Roy Ladurie, *Times of Feast, Times of Famine: A History of Climate since the Year 1000* (London, 1971); *On the Climates of History*, special issue, *Journal of Interdisciplinary History*, 10 (1980).

olive-killing frosts were more frequent. These were conditions which made harvest failure more likely.

The importance of inclement environmental conditions was evidenced in the calendar of mortality and—in so far as we can reconstruct it—of morbidity.[45] There were two peaks. In the late summer, 'fevers' and gastro-enteritic illnesses accounted for many deaths, notably among babies, who died in droves from summer diarrhoeas. The other peak was in the coldest winter months, when adults were most at risk. Deaths in these months were linked to pneumonia, pleurisy, and tuberculosis. The last in particular seems to have made an impact that was impressive yet also, because of the variety of symptoms presented, difficult to measure. We can be pretty sure, however, that many of the respiratory illnesses recorded as causes of death at Plougonver in Brittany in the middle decades of the seventeenth century (see Table 1*b*) were tubercular in origin, and overall it seems likely that tuberculosis was becoming the major cause of 'normal' adult mortality outside times of epidemic.[46] The widely attested presence

TABLE 1*b*. *Causes of death in Plougonver (Brittany), 1640–1660*

Cause of death	No.	%
Sicknesses of the respiratory organs	108	50.3
inc. pleurisy cases	*58*	*17.3*
Various fevers	61	18.2
'Old age'	38	11.3
Diseases of the digestive system	44	13.1
inc. dropsy cases	*31*	*9.2*
Wounds, traumatism	31	9.2
Dysentery	19	5.7
Eruptive fevers	14	4.2
inc. smallpox cases	*10*	*3.0*
Various infirmities	7	2.1
Apoplexy and sudden death	7	2.1
Paludism	2	0.6
Tumours, cancer	2	0.6
Miscellaneous	3	0.9
TOTAL	336	

Note: The 108 respiratory deaths are broken down into 63 certain and 45 likely cases; the 44 digestive deaths into 43 certain and 1 likely.

Source: A. Croix, *La Bretagne aux XVIe et XVIIe siècles: La Vie, la mort, la foi* (2 vols.; Paris, 1981), 227.

[45] For the calendar of mortality and morbidity, see Dupâquier, *Histoire de la population française*, 243.

[46] J. P. Bardet *et al.*, *Peurs et terreurs face à la contagion. Choléra, tuberculose, syphilis, XIXe–XXe siècles* (Paris, 1988); and Knapp, *Disease and its impact*, 139 ff.

of scrofula (which is tubercular in character) also bears witness to the importance of the malady, which increasingly attracted the attention of medical writers. Long before its nineteenth-century reputation as a Romantic, élite malady, tuberculosis was a disease of popular dirt and inanition, and one whose ascent scarred the whole course of the early modern period.

It has been suggested that the rise of tuberculosis from the late Middle Ages onwards may be linked to the decline of the great medieval scourge, leprosy.[47] Literally thousands of leper houses had studded the landscape of medieval France. Yet an inspection of those located in the diocese of Paris after the Black Death had revealed one-third of the institutions completely uninhabited, with only thirty-five lepers in a total of fifty-nine leper houses. This imbalance between structures of provision and lepers requiring aid grew even more disproportionate as time went on. At Dijon, there were nine lepers in 1512, but three by 1520, and for most of the 1520s only one; numbers dwindled, with the last leper dying in 1635. The last leper at Alençon had died in 1524, while at Vienne and Voley near to Romans the last deaths were in 1612 and 1624 respectively.[48] There was a tendency, moreover, for leper houses to be inhabited by dynasties of alleged lepers (or imposters): at La Buisserate near Grenoble the same family occupied the leper houses from 1569 to 1645 without it even being certain whether they in fact had leprosy. In Lyons it was said that individuals, including one henpecked husband, were getting themselves certified as lepers so as to gain entrance into the leper house, which offered a certain basic comfort. By the late seventeenth and eighteenth centuries, it would appear that the few remaining leper houses were inhabited by dynasties of pseudo-lepers who travelled around the country visiting each other, supporting themselves as beggars or as violin-players, and practising a strict endogamy.[49]

Though the fact of decline of the disease was clear for all to see, it was—and remains—a mystery why it occurred. The advent of plague was not sufficient to

[47] See the discussion of this point in M. Grmek, *Les Maladies à l'aube de la civilisation occidentale* (Paris, 1983), 291–306. On leprosy in general, see F. Bériac, *Histoire des lépreux au Moyen Âge: Une société d'exclus* (Paris, 1988); and P. Richards, *The Medieval Leper and his Northern Heirs* (Cambridge, 1977).

[48] L. Le Grand, 'La Désolation des églises, monastères et hôpitaux en France vers le milieu du xve siècle', *Revue des questions historiques* (1898), 136; J. Garnier, 'Notice historique sur la maladière de Dijon', *Mémoires de l'Académie des Sciences, Arts et Belles-Lettres de Dijon*, 2nd ser. 2 (1852–3), 52; P. Deschamps, 'La Maladrerie Saint-Lazare d'Alençon', *Bulletin de la Société historique et archéologique de l'Orne*, 88 (1970), 43–68; P. Cavard, 'Les Ladres à Vienne', *Évocations* (1972), 157; J. A. U. Chevalier, *Notice historique sur la maladrerie de Voley près Romans* (Romans, 1870).

[49] A. Prudhomme, 'Études historiques sur l'assistance publique à Grenoble avant la Révolution', *Bulletin de l'Académie delphinoise* (1892), 503–44, (1895), 123–350, (1897), 174–236; C. Petouraud, 'Les Léproseries lyonnaises au Moyen Âge et à la Renaissance', *Cahiers d'histoire*, 7 (1962), 425–62, and 8 (1963), 37–69: R. Drouault, 'Comment finirent les lépreux', *Bulletin historique et philologique du Comité des Travaux historiques et scientifiques*, 16 (1902).

kill off the disease, nor were the vicious pogrom-like attacks on lepers associated with the 1321 panic that lepers were poisoning wells, though these doubtless helped.[50] The measures of containment, institutionalization, and isolation aimed at lepers from the twelfth century are not a sufficient explanation either: isolation was never total, and there were probably always more lepers wandering around than were institutionalized in leper houses. Better diagnosis possibly produced the appearance of a decline in incidence: diagnostic trials in the Middle Ages conducted by panels of lepers tended to be hasty and they confused symptoms of leprosy with other virulent skin diseases. By the late fifteenth and sixteenth centuries medical men had taken over the trials and proved more cautious (and probably more accurate) in diagnosing the disease.[51] An explanation in terms of the declining virulence of the disease is attractive—laboratory trials show tuberculosis and leprosy to be asymbiotic, so it is possible to imagine a diffusion of tuberculosis acting to raise immunity levels—but rests unproven.

Whatever the explanation, the decline of leprosy was manifest by the fifteenth and sixteenth centuries.[52] Yet this solitary swallow in France's pathosystem could not a summer make. Whilst leprosy tiptoed silently and mysteriously out of the history of western Europe, a wide range of infections—though less spectacularly visible than the bubonic plague—continued to smear their variegated hues over early modern France's epidemiological landscape.

C. Death and the Demographic Regime

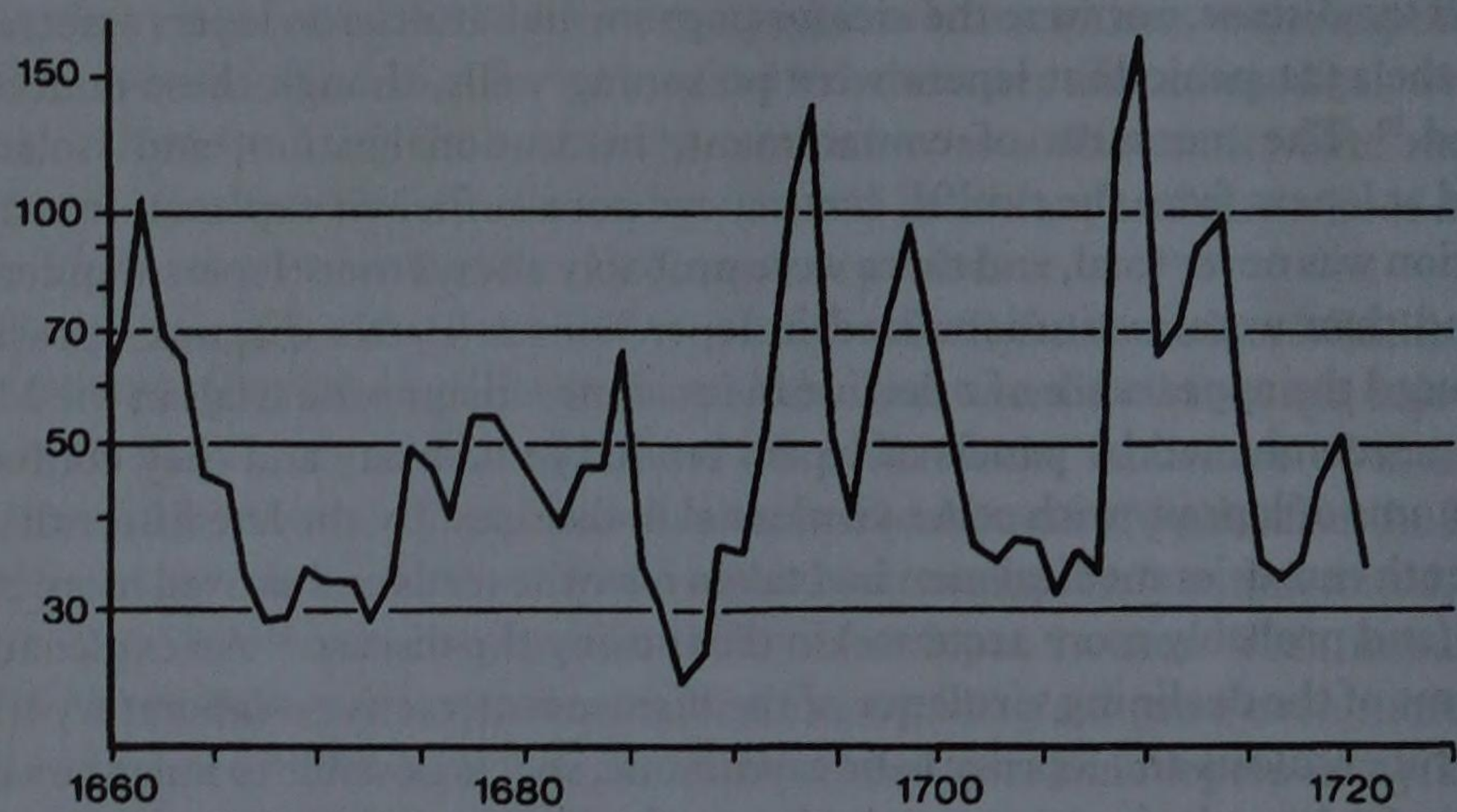
To construct a graph showing the number of births, marriages, and deaths in a village in sixteenth- and seventeenth-century France is to demonstrate the importance of the irregular and erratic human tribute extracted by killer diseases (see Fig. 1*b*).[53] If in normal years, mortality levels were slightly lower than birth levels, this relationship was abruptly reversed in years of high mortality, where the number of deaths rose anywhere between three and ten times, producing what historical demographers have called steeples of mortality. These

[50] M. Barber, 'Lepers, Jews and Moslems: The Plot to Overthrow Christendom in 1321', *History*, 66 (1981), 1–17; Bériac, *Histoire des lépreux*, 197–8; C. Ginzburg, *Ecstasies: Deciphering the Witches' Sabbath* (London, 1990), ch. 1.

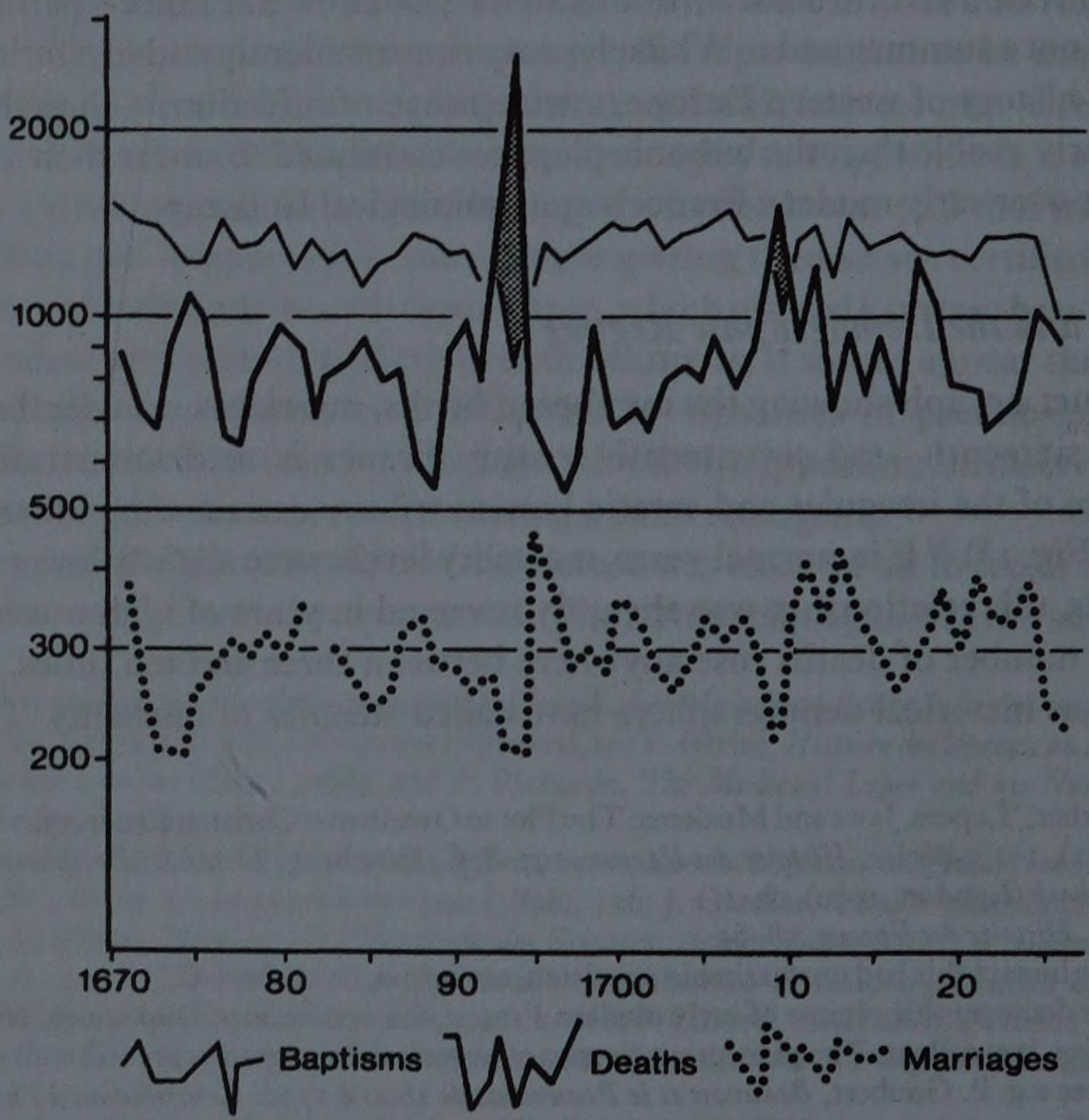
[51] Bériac, *Histoire des lépreux*, 58–65.

[52] For the impact this had on charitable provision, see below, ch. 4, Sect. C.

[53] On the demographic régime of early modern France, the synthesis of Dupâquier, *Histoire de la population*, is excellent. The pioneering classics of historical demography are still well worth consulting: see e.g. P. Goubert, *Beauvais et le Beauvaisis de 1600 à 1730: Contribution à l'histoire sociale de la France du XVIIe siècle* (Paris, 1960); R. Baehrel, *Une croissance: La Basse-Provence rurale (fin du XVIe siècle–1789)* (Paris, 1961); P. Deyon, *Amiens, capitale provinciale: Étude sur la société urbaine au XVIIe siècle* (Paris, 1967); and Le Roy Ladurie, *Paysans de Languedoc*. See too P. Goubert, *The Ancien Régime: French Society, 1600–1750*, Eng. trans. (London, 1969); and *Démographie historique*, special issue, *Population* (1975).



(i) The price of grain (by harvest year)



(ii) Deaths in Amiens (in parishes and in the Hôtel-Dieu)

FIGURE 1*b*. 'Steeples of mortality' and grain prices: Amiens, 1660–1730

Source: adapted from P. Deyon, *Amiens, capitale provinciale: Étude sur la société urbaine au XVIIe siècle* (Paris, 1967), 492, 526.

steeples mark the incidence of 'mortality crises' which form an integrative part of the 'demographic regime' prevalent in France over the late Middle Ages and early modern period. Below the level of longer-term social and economic trends, these set the tempo of daily life for the majority of the population.

Contemporaries recognized in mortality crises the impact of three life-threatening scourges which punctuated the lives of the population: namely war, famine, and epidemic disease (the latter often masquerading under the guise of plague). The rural noble Jean de Marconville in 1564, for example, evoked 'the terrible justice of God who, irritated against the filth of the sins of his people is habituated to hurling down to earth his trident with its three prongs: war, plague, and famine'.[54] It is important to recognize first, that the three scourges rarely if ever acted independently, and second, that epidemic disease not only acted as a factor by itself but also aggravated the gravity of the other two scourges. War and famine invariably, as we shall see, were associated with epidemic disease, but the latter could strike quite independently, out of the bluest of demographic skies. When the serious plague outbreak of 1627 occurred, for example, France had not yet begun to be involved in the Thirty Years War, and dearth only began in 1629 following the bad harvest of 1628. Eight of the thirty-four years of crisis mortality which occurred in Brittany between 1480 and 1662 were solely years of epidemics, quite unconnected either to a state of warfare or food supply problems.[55] Plague-bearing rats, flea-borne typhoid germs, smallpox viruses, and the rest did not need to wait on poor harvests or war operations in the affairs of humans, but pulsated to their own rhythms.

Deaths in battle in early modern Europe were a haystack in comparison with the Alpine heights reached by plague- and epidemic-related mortality. If war killed in large numbers, it did so off the battlefield rather than on it, not least through the medium of disease. Composed for the most part of the aggressive outcasts of many of the poorest and most disinherited parts of Europe—Scottish highlands, Irish bogs, Polish and Transylvanian wastes, Swiss mountains—and within France the denizens of Breton hedgerows, Alpine and Pyrenean valleys, and the *maquis* of the Massif Central, armies acted as a conduit between local disease pools and as diffusers of infections wherever they straggled.[56] Their importance as vectors of disease grew over the sixteenth and seventeenth centuries in line with the increase in their size. The 'Military Revolution' from the late sixteenth to the early eighteenth centuries saw wars of knights finally giving way to wars of mercenary infantrymen. Army size in the major European

[54] Cited in F. Berriot, *Athéisme et athéistes au XVIe siècle en France* (2 vols.; Paris, 1976), i. 50.

[55] Croix, *Bretagne*, 253.

[56] V. Kiernan, 'Foreign Mercenaries and Absolute Monarchy', *Past and Present*, 11 (1957), 66–86. Cf. A. Corvisier, *L'Armée française de la fin du XVIIe siècle au ministère de Choiseul: Le Soldat* (2 vols.; Paris, 1964).

states increased by a factor of ten. In France, the army of 50,000 men of Francis I (reigned 1515–47) could only have been achieved through amassing mercenary footsoldiers rather than depending on horse-borne cavaliers. The most massive rise in France's army was in the 1630s and 1640s, when the size of the army rose from some 20,000 in the late 1620s to over 200,000 men by the 1640s, and it stabilized at about a quarter of a million in the 1650s and 1660s.[57]

This process was part of a wider set of developments by which France was becoming the most powerful continental state in Europe. Yet this promotion was not without its ups and downs. France had been fortunate in that, once the Burgundian threat to the unity and cohesiveness of the French state was exorcized in the late fifteenth century, the Valois dynasty was in a good position to canalize the bellicosity of its nobility outside France: successive monarchs, notably Charles VIII and Francis I, fought Habsburg rivalry in the Italian Wars (1494–1559). The 'Renaissance state' which developed in these years was grounded in moves towards the centralization and bureaucratization of state power—moves which were, however, partially arrested by the outbreak of internal civil strife, notably the Wars of Religion (1561–98), pitching Catholics against Calvinists (or Huguenots).[58] The accession to the throne in 1589 of the Huguenot Henry IV (reigned 1589–1610), from the Valois's collateral, Bourbon line, helped religious balance to be found: Henry converted to Catholicism himself, yet in the Edict of Nantes in 1598 ensured Protestants within France a good degree of religious toleration. Religious conflict continued to grumble on, however, down to 1630, while a further bout of civil unrest—the Fronde (1648–52)—further destabilized the state. Despite outward appearances of rebellion and discontent, however, the foundati[illegible]hical absolutism were being laid in these decades by the 'cardinal-[illegible]elieu (in power, 1624–42) and Mazarin (1643–61). The policies of state centralization and bureaucratization were accompanied by ultimately successful efforts both to expand and to monopolize armed force, thus reducing the military threat posed by religiously inspired or politically ambitious grandees.

By the time of the Thirty Years War (1618–48) in particular, operational units in the army were as big as middling-size towns, and their mobility, indigence,

[57] C. Jones, 'The Welfare of the French Foot-Soldier from Richelieu to Napoleon', in id., *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989), 201, 234, citing unpublished work by David Parrott. For a general overview, cf. G. Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500–1800* (Cambridge, 1988).

[58] Useful general histories of France in this period include J. H. M. Salmon, *Society in Crisis: France in the Sixteenth Century* (London, 1975); J. Garrisson, *A History of Sixteenth-Century France: Renaissance, Reformation and Revolt* (London, 1995); R. Briggs, *Early Modern France, 1559–1715* (Oxford, 1977); and R. Bonney, *Political Change in France under Richelieu and Mazarin, 1624–1661* (Oxford, 1978).

and the lack of bureaucracy and sanitary control within them rendered them prone to the diseases of filth and promiscuity. Syphilis and skin diseases were endemic; dysentery was a frequent threat; in camps and besieging armies, typhus and typhoid fever (usually lumped together as 'camp fever') were perennial visitors; while plague too was often spread by army units. Admittedly, it is possible that this role was exaggerated: communities hit by an epidemic often viewed it as aggression visited upon them by outsiders, and sought out scapegoats for their ills: thus the French had christened syphilis the 'Neapolitan itch' (the Neapolitans preferred the title 'French pox').[59] There seems little doubt, however, that armies on the move spread infectious disease and caused high mortality levels off the battlefield among civilian populations. The city of Orléans, for example, a plaything in fighting during the Wars of Religion, endlessly besieged, taken, and retaken from 1562 to 1597, saw its prosperity broken by war activity and the plague epidemics associated with it, and its population dropped by a third.

Damage was economic as well as demographic: soldiers marched with famine as well as disease in their backpacks. The tradition of army bureaucracy for which the French army became famous under Louis XIV occurred almost wholly after 1670. Prior to that period, the army was highly decentralized administratively, and military supply was primitive in the extreme, and often subverted anyway by bureaucratic inefficiency, corruption, and state impecuniosity. For their subsistence, armies were heavily dependent on more or less legitimized practices of plunder.[60] With hunger in their bellies and arms in their hands, soldiers extracted their living from a peasantry much of which was already living close to the breadline. The approach of military units sent peasants scurrying to the woods for protection; when they returned, they found their granaries looted, their winecellars emptied, their fields flattened, their livestock roasted or rustled, their orchards and vineyards denuded by military firewood requirements. The passage of an army thus threatened the very means of subsistence and reproduction of peasant communities. Cities, whose trade was disrupted by military operations and who feared looting, were little better off, and might well receive the added burden of immigratory waves of disease-carrying and disinherited peasants from the surrounding countrysides. As armies lived by extracting their living from the land, biological imperatives dictated that the plunderers plundered friend as well as foe, so that what counted was not who was fighting whom but where.

[59] Quétel, *History of Syphilis*, p. 10.

[60] The key text for highlighting the place of plunder in early modern warfare is F. Redlich, *'De Praeda Militari': Looting and Booty, 1500–1815* (Wiesbaden, 1956). Cf. Jones, 'Welfare of the French Foot-Soldier', 213 ff.

For much of the century between the end of the Italian Wars (1559) and the end of the Fronde (1652), a good deal of fighting did indeed take place on French soil. The toll was heavy, including not merely civil strife but also major incursions made into French territory by foreign powers (notably Spain, with whom France was locked in combat between 1635 and 1659). War-stricken Franche-Comté lost between a half and three-quarters of its population between 1635 and 1644; Lorraine in 1660 (admittedly not yet part of France) contained only about half the number of inhabitants it had had in 1630; while Artois, Flanders, Alsace, and Burgundy were also severely affected by the fighting. During the Fronde, the area to the south of Paris, repeatedly ravaged by armies besieging (and relieving) Paris, suffered massive population losses.[61] War also often brought in its train the third great demographic scourge of early modern France, namely famine.

Parish priests—the social group closest to the poorest peasants and town-dwellers—were in no doubt that death by starvation could occur, and occur massively among their flocks. A note of caution about the demographic incidence of famine is, however, necessary. Many of early modern France's killer diseases acted independently of the nutritional status of an individual: this was certainly true of plague, smallpox, malaria, syphilis, and typhoid, and possibly true also of typhus and more benign diseases such as influenza (see Fig. 1*b*). The epidemiological record suggests that hunger may even have reduced the likelihood of infection in some cases, and that individuals rarely died of starvation *tout court*, but rather from medical conditions linked to nutritional deficiencies.[62]

Death in early modern France from starvation pure and simple was thus probably less widespread than contemporary witnesses claimed. However, a social structure in which large numbers of the poor lived close to the breadline left little room for the kind of deterioration in food intake associated with harvest failure. 'Steeples' of mortality thus frequently coincided with explosive rises in grain prices (see Fig. 1*b*). This relationship was most marked in the great cereal-growing plains of the north and north-east, where between 70 and 80 per cent of most peasants' and townspeople's diet was composed of bread. In some

[61] Lebrun, 'Crises démographiques', 216; J. Jacquart, 'La Fronde des princes dans la région parisienne et ses conséquences matérielles', *Revue d'histoire moderne et contemporaine*, 7 (1960), 257–90.

[62] On the relationship between nutrition and morbidity, see M. Livi Bacci, *Population and Nutrition: An Essay on European Demographic History* (Cambridge, 1989), which is part of a riposte to the 'nutritionist' explanation of population growth associated with the work of T. McKeown (summarized conveniently in his *The Origins of Human Disease* (Oxford, 1988)). Important contributions to a wide-ranging debate are also found in *Hunger and History: The Impact of Changing Food Production and Consumption Patterns on Society*, special issue, *Journal of Interdisciplinary History*, 14 (1983). Helpful for empirical detail (esp. on the grass-roots views of the parish clergy) is M. Lachiver, *Les Années de misère. La Famine au temps du Grand Roi* (Paris, 1991), though he seems unaware of the nutritionist debate (e.g. Livi Bacci is not cited in his bibliography).

other areas, a more varied diet acted as a nutritional shield against famine and its associated ills. Besides grain—ingested as stodgy porridges, soups, or pancakes as well as in the form of bread—Breton peasants, for example, enjoyed a rather mixed diet including buckwheat as well as wheat and rye, plus poultry, pork, and fish and seafood. Dietary variety was characteristic of the Midi too, which acted as a kind of culinary entrepôt for the fruits, vegetables, beans, and pulses of the Levant and whose day-labourers aspired, in normal times, to a sturdy diet of garlic, onions, beans, and aubergines, washed down with wine. The topographical accessibility of both areas gave them a head start over most of France as regards famine relief: no Breton locality, for example, was more than 80 kilometres from the sea, nor more than 25 kilometres away from a navigable waterway.[63]

It would be disastrously wrong to present too glowing a picture of dietary variety in early modern France. The diet of most individuals left a great deal to be desired. A long-term decline in the amount of meat-eating, in train since the fifteenth century, had produced an overdependence on cereals which left the majority of the population in a nutritionally vulnerable situation.[64] Low meat consumption meant a shortage of proteins and vitamins from which anaemia, rickets, and infant wasting diseases derived. A lack of dairy produce in many areas caused mineral deficiencies. There was also a number of dietary problems specific to certain areas: the spread of maize in south-western France from the mid-sixteenth century produced a rise in the skin condition pellagra, which derived from the virtual absence of niacin in the American 'wonder-crop'; while lack of iodine in the water-supplies of the central Pyrenees, the Alps, and Alsace-Lorraine induced a high incidence of goitre.[65] Overdependence on rye in the diet of some areas periodically produced outbreaks of gangrenous ergotism. The 'Saint Anthony's Fire' of the Middle Ages resulted from the consumption of fungally affected rye, and caused a horrifying malady whereby gangrene commencing at the big toe literally ate its way up the flesh of the legs, producing madness and agonizing death. The last great outbreak in the medieval cycle of the disease had occurred in Dauphiné and Lorraine in 1451. Unlike leprosy, however, ergotism came back, affecting the Sologne and Blésois in 1630, Dauphiné in 1639, and Languedoc, Orléanais, Sologne, and Dauphiné in the 1670s.[66]

[63] For Brittany, Croix, *Bretagne*, 39, 805 ff.; and for Bas-Languedoc, Le Roy Ladurie, *Paysans de Languedoc*, 60 ff. On the downside, accessibility for famine relief also signified ease of disease diffusion.

[64] F. Braudel, *Les Structures du quotidien: Le Possible et l'impossible* (Paris, 1979), 159 ff.; Livi Bacci, *Population and Nutrition*, 94.

[65] Livi Bacci, *Population and Nutrition*, 29. For goitre, see P. Demonet, P. Dumont, and E. Le Roy Ladurie, 'Anthropologie de la jeunesse masculine en France au niveau d'une cartographie cantonale (1819–1830)', *Annales ESC* 31 (1976), 738.

[66] C. Poitou, 'Ergotisme, ergot de seigle et épidémies en Sologne au XVIIe siècle', *Revue d'histoire moderne et contemporaine*, 23 (1976), 345–68. See also Brabant, *Médecins, malades et maladies*,

The fact that the cause of ergotism had been recognized by the late seventeenth century was not enough to stop the disease from occurring: resort to fungally affected rye which carried the risk of ergotism was evidently felt to be preferable to avoiding the crop altogether and going hungry—and perhaps starving. This chain of causation linking hunger to disease through the ingestion of unsuitable foodstuffs was in fact a widespread one. When the harvest failed, or perhaps when troop movements had destroyed it, and food was short, individuals consumed crops and fruit before they were ripe or when they lay rotting. Or else they resorted to anything at hand: a chronicler in war-stricken Alsace in 1637 recorded peasants eating 'weeds, roots, leaves, rats, mice, the corpses of hanged criminals, rotting carcasses'.[67] Such behaviour produced gastro-enteritic maladies (perhaps the biggest of baby-killers) and sent the late summer mortality levels sky-rocketing upwards.

The ravages of infectious diseases in a social environment characterized by vulnerability and pollution suggest that, as in the Third World today, a synergistic effect was in operation combining the effects of undernourishment and an unbalanced and deficient diet with the impact of disease. Hidden hunger and want, and complex patterns of secondary infection, were mundane—and deadly—realities. Starvation was overdetermined: whatever the cause of a mortality crisis, disease tended to take over and impose its own agenda. But that fact should not obscure the grim social and nutritional realities which lay beneath the surface for much of the population.[68]

A cat may look at a king: so may a microbe. In this environmentally perilous society, an element of risk from disease was integral to the life of everyone. Diseases were borne by air and water used by all, and by a filth which was far from being solely the patrimony of the poor. The closest personal attention from his medical advisers could not prevent the infant Louis XIII from measles and smallpox or from contracting facial scabies so severe that it rendered him physically repulsive for his early years.[69] The privileged classes were moreover disproportionately affected by a number of 'diseases of affluence'. The diet at the Valois court, for example, was heavily unbalanced, and contained few vegetables and no dairy produce.[70] This kind of diet probably helped cause gout and gallstones, both of which were associated with consumption of food with a high uric

94–5; and M. K. Matossian, *Poisons of the Past: Molds, Epidemics and History* (New Haven, 1989) (the latter work should be used with the greatest caution).

[67] Lebrun, 'Crises démographiques', 216.

[68] This important comparative point is elaborated by A. Carmichael, 'Infection, Hidden Hunger and History', *Journal of Interdisciplinary History*, 14 (1983), 249–64. Cf. Lachiver, *Années de misère*, 205 ff.

[69] M. Foisil, *Journal de Jean Héroard* (2 vols.; Paris, 1989), 94, 108.

[70] J. Boucher, 'L'Alimentation en milieu de cour sous les derniers Valois', in J. C. Margolin and R. Sauzet (eds.), *Pratiques et discours alimentaires à la Renaissance* (Paris, 1982), 161 ff.

acid content (spicy food, fish, wine, etc.). Dietary excess possibly explains the apparently high incidence of deaths from 'apoplexy' which courtiers recorded.[71] All ranks of society, moreover, were affected by diseases of dirt, whether water-borne or carried by lice. Châteaux stank of excrement as did cottages, the palace was as much a home to epidemic disease as the tenement. The water the king of France was ceremonially brought every morning and in which he washed his hands was akin to holy water: it did not reach his face or his body. The monarch took no baths, save (rarely) for medicinal reasons.[72]

In such circumstances, where the threatening epidemiological landscape of early modern France seemed to offer no places to hide, it is tempting to conclude that luck was a better protection than wealth against sickness. Yet a good deal of evidence exists to suggest that disease was in fact selective, and that certain categories of the poor and defenceless suffered disproportionately from its effects. The very young, the aged, and nursing-mothers were especially vulnerable. Child mortality was massive: on average one child in four died before his or her first birthday, and another one in four died before adulthood. If it normally takes two adults to make one baby, in these circumstances, as Pierre Goubert has famously remarked, it took two babies to make one adult. Between four and eight times as many babies died prematurely in the period from 1600 to 1670 than the 2 or 3 million plague victims of the period,[73] yet medical literature was astonishingly unloquacious about this phenomenon—indeed it often had more to say about leprosy which, despite its disappearance from early modern western Europe, still found a prominent place within the textbooks. It has taken the work of historical demographers over the last few decades to register the full horror of a situation which left contemporaries, some have argued, rather indifferent.[74]

[71] D. Van der Cruysse, *La Mort dans les 'Mémoires' de Saint-Simon: Clio au jardin de Thanatos* (Paris, 1981), esp. 219–24; R. Favre, *La Mort dans la littérature et la pensée françaises au siècle des Lumières* (Lyons, 1978), 46.

[72] Lebrun, *Médecins, saints et sorciers*, 143; Vigarello, *Concepts of Cleanliness*, 12 ff.

[73] For plague deaths 1600–70, see Biraben, *Hommes et la mort*, i. 306–10 (2.5 m–3 m deaths). For child mortality, our calculations are as follows: (*a*) annual average number of births for a population of *c.*20 m. on average, at the level of 40 live births per 1,000 head of population = 800,000 live births; (*b*) for a period of 70 years (1600–70), this would produce 800,000 × 70 = 56,000,000 live births; (*c*) number of infant deaths, assuming infant death rate is 250 ‰ = 14,000,000 infant deaths. Of course, if we took adulthood as the base line and measured childhood and adolescent deaths as well, then we could conclude that 28 m. never achieved full adulthood—between seven and eleven times as many as total plague deaths.

[74] The question of putative indifference towards children and child mortality was opened up by P. Ariès, *Centuries of Childhood* (Harmondsworth, 1962). The most exaggerated formulation is E. Badinter, *The Myth of Motherhood* (London, 1981). See too the contribution of P. Chaunu, *La Mort à Paris (XVIe–XVIIe–XVIIIe siècles)* (Paris, 1978), 174–5; and the cool appraisal of the debate in S. Wilson, 'The Myth of Motherhood a Myth: The Historical View of European Child-Rearing', *Social History*, 9 (1984), 181–98.

A similar pattern of insouciance concerned the deaths of mothers in childbirth. Maternal mortality (mainly through post-partum puerperal fever) stood at over 10 per 1,000 live births on average, and was considerably higher for primiparæs and for older women. 'A pregnant woman', went the adage in Armagnac, 'has one foot in the grave.'[75] It probably constituted the major cause of death in adult women after tuberculosis.[76] Only in 1663 did Louis XIV call in a male midwife to deliver the child of his mistress Louise de la Vallière, thus launching an enduring fashion for male rather than female birth attendants and encouraging growing medical concern with this area of health.[77] Medical men also, as we shall see, tended to write off old age as a fit subject for their efforts—and the same seems to have been true for the aged themselves. Diaries are full of men in their fifties regarding themselves as aged fossils.[78] It was easier to ascribe death of an old person to advanced years than to offer a more detailed analysis. More than one death in ten at Plougonver in Brittany between 1640 and 1660 was ascribed simply to old age (see Table 1*b*).

If disease was thus biologically choosy—picking out the most fragile and vulnerable of bodily organisms—it was also socially selective, as is highlighted by evidence relating to life expectancy and the incidence of mortality. Although aggregate data often suggests that life expectancy for rich and poor was fairly similar, close-grained studies show a more nuanced pattern. In seventeenth-century Geneva, for example, the life expectancy at birth of a day-labourer or journeyman was 18.3 years—half the expectancy of a member of the social élite. In Rouen, less than half the children of city notables died before their tenth birthday, whereas the figure for workmen's children was 60 per cent.[79] Indeed, the life expectancy of members of the social élite would have been even greater had they not engaged in sending out their children to wet-nurses—a practice which produced a much higher mortality than maternal suckling, which was all the very poor could afford.

Similarly, even if, all things being equal, plague was as prone to kill a prince as a pauper, things rarely were equal in early modern France. In Rennes, it was consistently the poorest parts of town which produced the most plague-victims, and the same was true at Dijon in 1545 and Reims in 1635. Plague killed three-

[75] Cited in M. Bouteiller, 'Attitudes, rites, cérémonies', in M. François (ed.), *La France et les français* (Paris, 1972), 78.

[76] Dupâquier, *Histoire de la population*, 238–9. For the whole grisly picture, see too E. Shorter, *A History of Women's Bodies* (London, 1982).

[77] See below, esp. Ch. 9, Sect. E.

[78] There has been a recent revival of interest in the history of old age. See in particular J. P. Gutton, *Naissance du vieillard: Essai sur l'histoire des rapports entre les vieillards et la société en France* (Paris, 1988), esp. ch. 1; and D. G. Troyansky, *Old Age in the Old Régime: Image and Experience in Eighteenth-Century France* (Ithaca, NY, 1989).

[79] A. Perrenoud, 'L'Inégalité devant la mort à Genève au XVIIe siècle', *Population*, special issue, *Démographie historique* (1975), 236. The life expectancy for middling groups (24.7 years) neatly bisects those of the rich and the poor. Dupâquier, *Histoire de la population*, 227–8.

quarters of pauperized silk-workers in Lyons in 1628–9, but only two-thirds of the wealthier printing-workers. At Clermont in 1631, the disease disposed of half the poorer family heads on the tax rolls, but only a third of middling groups and a fifth of the most highly taxed.[80] The wealthy were more likely to be able to insulate themselves from the worst of epidemics. The higher one was up the social ladder, for example, the more likely one was to be able to flee the disease early, and to stay away long. Many wealthy families retreated to barricade themselves into their country estates: the leases of rural tenants of wealthy town-dwellers often stipulated that a room was to be kept free 'for the convenience of [the landlord] in time of war or plague'.[81] Nuns in convents in the Lyonnais and eastern France enjoyed a completely different demographic regime from the peasants of the surrounding villages: the main mortality crises registered no effect within them, while the nuns also exhibited a marked longevity compared with peasant women.[82] In these circumstances, one can understand how epidemics were viewed primarily as popular diseases: diseases of the poor, particularly the mobile and rootless poor, from whom respectable groups sought protection. The municipal authorities of Nantes which in 1586 noted how 'the over-great multitude of poor all engender a bad air and contagion' were only echoing a general conviction that disease was somehow a phenomenon to which the poor were particularly prone, and that the victims of disease were also its cause.[83]

To understand the way in which an apparently dangerous and pathogenic poverty of mobility and disease was generated, we need to understand the mechanisms of impoverishment. The frequent incidence of crisis mortality in early modern France contributed to the maintenance of high overall mortality rates—roughly 40 ‰ (that is, 40 deaths per annum in every 1,000 head of population). Overall, however, population levels maintained a considerable degree of long-term stability. Although it took France nearly two centuries to recover its pre-Black Death population level, once this had been achieved in the sixteenth century, the size of the population remained relatively static at between 18 and 21 millions up to the early eighteenth century. This pattern of stability was evidenced too by the often extraordinarily high level of sedentariness of much of the population, most of the time: in northern and eastern villages, it was common for between two-thirds and nine-tenths of marriages to be between

[80] Lucenet, *Grandes Pestes*, 152. Cf. Hildesheimer, *Terreur et la pitié*, 91.

[81] G. Cabourdin, *Terres et hommes en Lorraine (1550–1635): Toulois et le comté de Vaudrémont* (Nancy, 1979), 108 n. 137.

[82] D. Dinet, 'Mourir en religion aux XVIIe et XVIIIe siècles: La Mort dans quelques couvents des diocèses d'Auxerre, Langres et Dijon', *Revue historique*, 525 (1978), 31–2. On the same theme, see J. Brown, 'Monache a Firenze all'inizio dell'età moderna. Un'analisi demografica', *Quaderni storici*, 85 (1994).

[83] Cited Croix, *Bretagne*, 461.

individuals from the same or adjacent villages. Another factor of long-term stability was high fertility levels (also around 40 ‰) typical of populations not systematically engaging in birth control activity.

In the context of a highly oscillatory short-term mortality pattern, the marriage rate played a key role as a kind of regulatory and equilibrating mechanism.[84] Given the dominance of landholding patterns by the social élite—seigneurs and clergy possessed between them between half and two-thirds of the cultivable land surface—there was always likely to be pressure on land from the peasantry, particularly in a period of population expansion, as in the early sixteenth century. Establishing a household based on only a small amount of land and savings was a recipe for economic non-viability and, consequently, disaster. Under the so-called western European marriage pattern observable in early modern France, couples consequently married late (men on average in their late twenties, women at between 23 and 25) and marriage was usually associated with the establishment of a separate household. Not all individuals made it through to wedlock, however, and the system was supported by the development of a pool of marriageable partners, with potential couples deferring marriage until an economic niche appeared in the pattern of landholding, reconciling themselves to celibacy or else drifting off to the towns. Such niches were inevitably more numerous in the aftermath of a mortality crisis, through the death in the family triggering inheritance, or through the death of neighbours releasing property onto the market. At the beginning of a mortality crisis, the high level of deaths might be matched by a drop (of up to 50 per cent) in the marriage rate; but once the crisis ended, marriages rose very fast, laying the basis for a demographic recovery through the procreative energies of newly married couples. The pool of celibates which the delayed marriage pattern ensured was thus essential for the mechanism to be effective, and for recovery to be viable.

Deferred marriage thus acted both as a kind of demographic cushion, allowing populations to recover from crisis mortality, and as a homoeostatic device keeping population size at a level consonant with the availability of land. Clearly, one should not imagine that the system worked through some kind of divine circuitry to allow an exact balance. On the contrary, in fact, and despite the sedentariness of most of the population, the demographic pattern we have outlined secreted a measure of migration off the land at all times. In the first half of the

[84] Jacques Dupâquier's convincing analysis of the role of nuptiality in the demographic régime is outlined in his *Histoire de la population*, esp. ch. 9. See too the classic P. Chaunu, *La Civilisation de l'Europe classique* (Paris, 1966), esp. 196 ff.; and B. Derouet, 'Une démographie sociale différentielle: Clés pour un système auto-régulateur des populations rurales de l'Ancien Régime', *Annales ESC* 35 (1980), 3–41. For the 'western European marriage pattern', see esp. the pioneering paper of J. Hajnal, 'European Marriage Patterns in Perspective', in D. V. Glass and D. E. C. Eversley (eds.), *Population in History* (London, 1965).

sixteenth century, when the population was still expanding rapidly in the period of recovery from the ravages of the Hundred Years War, population growth increased the number of individuals either unable to establish themselves on the land, or establishing themselves on micro-property incapable of supporting a family. Secretion consequently became a flood. The cities of early sixteenth-century Europe found themselves facing a social problem of hordes of shiftless and impoverished paupers driven off the land and seeking their livelihoods in the urban environment. This structural problem was moreover spasmodically aggravated by the social impact of the array of demographic disasters we have chronicled.

In these circumstances, the feckless, rootless, and impoverished masses of early modern towns seemed the very embodiment of disease and disorder, threatening the integrity and health of the body social. It seemed a short step to link these poverty-stricken hordes with the ills—and diseases—abroad within society. For rural nobleman Jean de Marconville in 1564, the three great scourges (war, famine, disease), were embodied within this 'immense troop of paupers, sickly, weakly, and languorous in their bodies, from whom there emerged a stinking breath and infection of the air which evaporated from their bodies'.[85] The pauper was disease embodied, and his or her frame was so thoroughly penetrated by the aggressions of disease, that it became open to the passing onlooker, quasi-transparent to the casual gaze: a writer in 1607 evoked paupers, whose bodies—like the corpses of plague-victims—were turned into grotesque entities which knew no bounds between inside and out:

> noteworthy by a conspicuous rash, mange, itch, canker; bleeding with ulcers and scrofula; hobbled, covered with boils and pus; epileptic, leprous, all wounded, deformed and horrible in their visages; all but skin and bone, like prostrate flayed corpses, in whom we see the veins and nerves all uncovered; and so stunted and puny that one can remark their entrails moving within their breasts.[86]

Such comments highlight the limitations of purely statistical reconstructions of morbidity and mortality patterns, in taking us towards a full understanding of the significance and patterning of disease in early modern France. It was certainly axiomatic to contemporaries that disease was more likely to be located among the poor than the rich. Yet this assumption derived not merely from an

[85] For the urban problem of poverty, see the broad outline in J. P. Gutton, *La Société et les pauvres: L'Exemple de la généralité de Lyon (1534–1789)* (Paris, 1971); N. Z. Davis, *Society and Culture in Early Modern France* (Stanford, Calif., 1975); and B. Geremek, *La Potence ou la Pitié: L'Europe et les pauvres du Moyen Âge à nos jours* (Paris, 1987). For Marconville, cf. Berriot, *L'Athéisme*, 50.

[86] *La Chimère, ou Phantosme de la mendicité* (n.p., 1607), 2. On this idea of the grotesque body (esp. of the lower orders), see too the classic M. Bakhtin, *Rabelais and his World*, Eng. trans. (Bloomington, Ind., 1984).

impressionistic feel for socially differential mortality but also from deeper mental assumptions and representations. If as historical demographers we can accept the likelihood of rootless paupers carrying infectious disease, as cultural historians we must also acknowledge, and try to understand, how the medical intertwined with the moral, the demographic with the discursive, and how conceptions of sickness and health were constructed within the broader *mentalités* evident in early modern France.

D. 'Living with One Foot in the Air': The Social Construction of Death and Disease

Conceptions of disease in early modern France found a kind of representational centre of gravity in the bubonic plague, which possessed a resonance and visibility which occluded the noxious realities of a host of other infections and conditions. Consequently, the pattern of mortality which we can today piece together demonstrates some silences and dark spots which seem to have been barely visible to contemporaries. One dazzlingly blind spot, as we have suggested, was child mortality which, in everyday unhygienic conditions, was massively heavy (as was death in childbirth). It seems too that many individuals, notably peasants, were able to endure almost unthinkably high levels of pain: the appalling tortures handed out to putative witches, for example, did not prevent some at least living to tell the tale. Inconveniences like hernias and, for women, prolapsed wombs, were apparently borne stoically.[87] Symptoms such as vomiting and diarrhoea may have been so frequent as not to be regarded as exceptional or pathological. Much the same applies to skin infections, which seem to have been universal among soldiers, in towns, and in certain regions of the country. Given the high survival rate for every infection within France's epidemiological landscape apart from plague, more individuals had suffered from infectious diseases other than plague; indeed, as with smallpox, they even carried the pocks and stigmata with them through their lives. Yet contemporaries are far more loquacious about plague mortality than about the morbidity associated with any other disease.

Disease was thus constructed by French men and women in the early modern period in a way totally different to our own. This was a consequence not only of

[87] R. Rey, *History of Pain* (Paris, 1993), 74, 99 ff. For witchcraft torture, cf. J. Tedeschi, 'Inquisitorial Law and the Witch', in G. Hennigsen and B. Ankarloo (eds.), *Early Modern Witchcraft: Centres and Peripheries* (Oxford, 1989), 103 and n.; and E. Delcambre, *Le Concept de la sorcellerie dans le duché de Lorraine aux XVIe et XVIIe siècles* (3 vols.; Nancy, 1928–30), ii. 256–7. For hernias, Didelot, 'Description topographique et médicale des montagnes de la Vôge', *Mémoires de la Société Royale de Médecine*, 2. 137–8 (1780: a late but usable reference); and for female conditions, cf. the sorry catalogue in Shorter, *History of Women's Bodies*.

their ignorance of germ theory and modern science, but also of the meanings which they placed on death and the social and biological priorities these expressed. Plague's strategic place in this construction of health and ill health was based not simply on its domination of the epidemiological landscape, but also because it provided an archetype of what sickness was about, a master set of metaphors and linkages signalling in the direction of fundamental questions of meaning. The most significant social meaning of a plague outbreak was that, as we have seen, it mocked human agency and exemplified the ineffability of divine grace. Just as plague morbidity was scarcely visible in the disease's headlong rush towards a fatal termination, so the disease's assault on and penetration of the human body and the body social had to be interpreted not merely in medical language but rather in terms of individual and collective sinfulness. The words *la peste* and *le mal* used to describe the plague had moral and religious resonance as well as a biologico-social meaning.[88]

Viewed from this perspective, the story of the plague so endlessly recounted in plague tracts and treatises, in municipal ordinances, in episcopal letters, in government edicts, and in private diaries thus concerned the wish to repent past sins and to lead a good Christian life. From the account of the 'Plague of Justinian' in 588 given by Gregory of Tours in his *History of the Franks* right up to the accounts of the last outbreak of plague on French soil, which was to take place at Marseilles in 1720, there is a remarkable family likeness in the story-telling. The *History of the Franks* constitutes a kind of ur-text for plague writing, a script for a plague outbreak which brooked little alteration: the plague came from outside, and struck silently into a sinful city; vast numbers fled; the clergy stayed at their posts, offering consolation to the dying; collective acts of penitence were dutifully performed; the plague lifted and the inhabitants returned to a purified city, praising God for their deliverance.[89] Over the centuries since the Black Death, numerous accretions had been added to this basic script, but the script remained. 'Since God has only sent the plague to punish sins', fulminated Massillon, bishop of Clermont, in the reign of Louis XIV, 'all must needs think seriously of changing their ways, without which they can be sure that God will prepare for them even more terrible punishments.'[90]

The discourse on plague was thus less a medical prescription than a pedagogic, proselytizing text, a parable about the Christian community's repentance. 'The malady is too public to doubt that God is irritated with his people,' the cathedral chapter at Saint-Pol-de-Léon in Brittany proclaimed in 1652, 'and

[88] On the disease's metaphorical freight, see esp. Jones, 'Plague and its Metaphors'. The pioneering discussions of S. Sontag, *Illness as Metaphor and AIDS and its Metaphors* (new edn., New York, 1990), are still well worth consulting.

[89] See Gregory of Tours, *History of the Franks*, bk. 4, ch. 3.

[90] Cited in Favre, *Mort*, 72.

since the danger concerns everyone, so it is reasonable that everyone should set about deflecting his justice and turning aside this scourge which is causing before our eyes so much damage within this region.'[91] For Nicolas Pavillon, the Jansenist bishop of Alet in the Pyrenees, the advent of plague in 1663 was an opportunity to settle moral as much as medical disorder. 'For what sin does God ordinarily send this scourge of plague?', he apostrophized. 'He sends it to punish all sorts of sins, but especially those which are public and scandalous, such as blasphemies, swearing, adultery, concubinage and other public impieties, sensuality and excess in celebrations, frequenting bars, pomp, theatre, dissoluteness in dress, profanation of holy days, and generally all the sins which scandalize the public.'[92]

A panoply of collective forms of religious activism were displayed in the quest for security. Mass processions had always been one of the most popular forms of collective penitence—in Bourg-en-Bresse in 1504 there were as many as fourteen daily—though the belief that they afforded further opportunities for contagion led to these being restricted during the sixteenth century. Other acts of penitence were enjoined, such as pilgrimages and prayers: every head of family in Toulon in 1664 was instructed to kneel outside his front door three times daily and beg God's forgiveness. Collective vows were popular too: Montpellier in 1374, for example, had created the vogue for a 'waxen girdle', an elongated candle wrapped around the ramparts of the city as a symbolic protection against outside aggression. Elsewhere, bells to ward off plague were endlessly rung (this symbolic gesture was endorsed by physicians, who approved of the idea of the poisonous air being agitated); while in Brittany calvaries and votive crosses were widespread. The intercession of saints whose names were associated with the plague, notably Sts Sebastian and Roch, was endlessly invoked: in the tip of Lower Brittany, there were no fewer than 157 statues of St Sebastian, 103 of St Roch, and nearly a hundred other related votive objects (chapels, altars, paintings, stained-glass windows) scattered around the churches of the region.[93]

The time-honoured script for plague had little room for passive acceptance of death. The *Capucin charitable*, a plague tract of 1662 penned by a Capucin monk, condemned fatalism in the face of plague, contrasting the activism of Christians with the passivity of Turks, infidels, and libertines.[94] One could pray and pray and pray again ... but writers on the plague from the late fifteenth cen-

[91] Cited in D. Samson, 'La Peste et les saints protecteurs dans le Finistère: Recherches préliminaires', *Bulletin de la Société archéologique du Finistère*, 96 (1970), 201–2.

[92] Cited in Favre, *La Mort*, 72.

[93] Biraben, *Hommes et la mort*, ii. 67, 63, 71. For the culture of death in early modern Brittany, see esp. Croix, *Bretagne*, ii.

[94] Maurice de Toulon, *Le Capucin charitable, enseignant la méthode pour remédier aux grandes misères que la peste a coutume de causer parmi les peuples* (Paris, 1662): see esp. 25, 110.

tury recommended in addition a range of administrative measures aimed at buttressing religious measures. Sometimes these were limited; eleven of the twelve articles in the code of action introduced in Béziers concerned purely spiritual acts.[95] As time went on, however, an impressive battery of measures evolved, codified in the major cities in the sixteenth century (in Paris, for example, in 1531), and in lesser centres in the early seventeenth century. The measures enshrined the kind of religious measures listed above; forbade entry into the town of goods and individuals from plague-affected areas; established either a collegial health board (*bureau de santé*, *conseil de santé*) or a more authoritarian *capitaine de santé* to coordinate and enforce policy; instituted quarantines for essential communications; established plague hospitals and regulations regarding the isolation of infected households; introduced street-cleaning and other measures of public hygiene; set up burial and disinfection services; upheld law and order; and ensured proper food supplies—expenditure on grain was often the largest item of plague expenditure—financed if necessary by a local tax. Port cities also came to run a lazaretto service for enforced quarantine.[96]

The role of medicine and medical practitioners in this largely municipal and localist regulation was rather limited. There was a medical team appointed—a *médecin de santé* and/or *chirurgien de santé*, usually on very good wages—which verified plague cases and offered advice on public hygiene. The plague script did not leave much room for positive action from them: indeed the *médecin de santé* at Saint-Lô was thrown into prison under suspicion of witchcraft for having some limited success in the cure of plague victims![97] As even Ambroise Paré admitted, plague 'derives from man's iniquity' and was the means by which 'the Lord punishes idolatry and the profanation of his service', so that 'the principal antidote against the plague [was] the conversion and amending of our lives'.[98] The Christian community coming to terms with plague thus invoked the aid of religion, administration, and medicine—with the last the least important of the three.

Furthermore, plague texts tended to present one of the most profoundly shocking aspects of a plague outbreak as the rupture in normal religious activities, highlighting in particular how difficult it was for Christians caught up in the plague to die a 'good death'. The plague victim died suddenly, alone, bereft of family and friends and was buried without a proper funeral and cast into an

[95] A late medieval case cited by S. Guilbert, 'A Châlons-sur-Marne au xve siècle: Un conseil municipal face aux épidémies', *Annales ESC* 23 (1968), 1299.

[96] Biraben, *Hommes et la peste*, for all these. See too Panzac, *Quarantaines et lazarets*; and below, Ch. 6, Sect. 4.

[97] R. Leclerc, 'La Vie médicale à Saint-Lô (xvie–xviie–xviiie siècles)', *Notices et documents publiés par la Société d'agriculture, d'archéologie et d'histoire naturelle du département de la Manche*, 40–2 (1928–30): 41 (1929), 97–101.

[98] 'Livre traictant de la peste', 527.

unconsecrated pit. This was the diametrical opposite of the religious construction of the good death, as it had emerged in the edifying literature of the Counter-Reformation. For the post-Tridentine Church, death was, as the devotional literature put it, 'the terrible moment on which eternity depends',[99] and as such had to be approached in a set of highly ritualized forms. Whereas the plague death was sudden and capricious, the good death was planned and came as the culmination of a life of Christian living in the thought of death. On this, the Protestant view was similar to the Catholic one: 'even in the best of health', Jean Calvin advised, 'we should have death always before our eyes [so that] we will not expect to remain on this earth forever, but will have one foot in the air, so to speak'.[100]

The death-bed was thus the locus of a carefully orchestrated ritual ordered by the dying person and aimed to secure salvation. Similarly, whereas the plague death was silent and alone, the 'good death' was public—the death-bed was surrounded by family, neighbours, and fellow Christians; whereas in the plague death the dying person died unshriven, the 'good death' was clericalized—the priest played a key role in preparing the soul of the dying person, recalling past sins, urging a true repentance, offering consolation and counsel in the last moments. Though both Protestants and Catholics shared much of this vision, the clear political and confessional dominance which Catholicism enjoyed meant that the master-script for the liturgy of dying was a Catholic one. The size of the Huguenot community hovered around the one million mark until towards the end of the seventeenth century, when, following the Revocation of the Edict of Nantes (1685) which marked the end of a period of religious toleration for Protestantism, it plummeted.

The making of a will was an integral part of the ritual of the good death, and an act the plague victim would find difficult to achieve. Characteristically dictated on the death-bed or in anticipation of it—'knowing that if the moment of death is uncertain, nothing is more certain than death itself' went the stock phrase—the will was not simply a dry economic document for the disposal of property, but also gave the opportunity for a vibrant statement of faith. Each will had a lengthy religious preamble—often, it is true, adapted from a stock of phrases stored by the notary who transcribed the document—in which the dying made a personal statement of faith, invoked the intercession of saints,

[99] Cited in M. Vovelle, *Piété baroque et déchristianisation en Provence au XVIIe siècle: Les Attitudes devant la mort d'après les clauses des testaments* (Paris, 1973), 75. On the literature of the 'good death', see the outstanding D. Roche, ' "La Mémoire de la mort": Recherches sur la place des arts de mourir dans la librairie et la lecture en France aux XVIIe et XVIIIe siècles', *Annales ESC* 31 (1976), 76–119; and R. Chartier, 'Les Arts de mourir, 1450–1600', ibid. 51–75. Also useful are Chaunu, *Mort à Paris*; Ariès, *Hour of Our Death*, esp. 348 ff.; and M. Vovelle, *Mourir autrefois: Les Attitudes devant la mort aux XVIIe et XVIIIe siècles* (Paris, 1974).

[100] Cited in Ariès, *Hour of Our Death*, 302.

made a string of religious and charitable benefactions, elected the place he or she wished to be buried, and laid down how the funeral was to be conducted. The funeral itself was a link between the privacy of the individual's moment of death and the wider collectivity: at once the most private and the most public of acts, it materialized the individual's passage into the next world in forms which integrated the whole Christian community. The ceremonies of the great and good were vast orchestrated spectaculars, involving family, friends, confraternities, religious communities, paupers dressed in black and carrying candles, whose procession through the streets it was impossible to avoid. Even a pauper's burial observed the forms, however, since it was a venal sin to die intestate, and individuals at all levels of society engaged in drawing up wills: the practice became three times as common in Paris over the sixteenth and seventeenth centuries.[101] In time of plague, significantly, funerals were banned, either as a health risk or because the religious encadrement could not be found: indeed, plague accounts occasionally stress how the first funerals to be held after the passing of a plague epidemic were greeted with spontaneous acts of rejoicing. The passing of plague made the good death possible again.[102]

Like the plague outbreak itself, the discourse on the good death left only a very limited role to medicine and medical practitioners. Questions of morbidity were absent: the bed of suffering was the locus of salvation, not potential cure. The most that was asked of the doctor was discretion and cooperation: in canonical declarations and state decrees, from the Lateran Council of 1215 down to a royal edict in 1712, the doctor was enjoined to warn the sick of the need to confess—and indeed to cease his ministrations unless this requirement was met.[103] The doctor was also to warn the clergy if a sick person was dying. The priest—the 'physician of souls', as religious literature often put it—had precedence over the doctor at the bedside of the sick and dying. The doctor might even, in some cases, be cast as an additional torment the dying person had to endure: tales of the horrifying death of St François de Sales in 1627 dwelt lingeringly on the 'surgical pork-butchery' (*charcuterie des chirurgiens*), as surgeons repeatedly inserted red-hot irons against his skull.[104]

The priority of the priest over the medical man—at the death of the individual as also at moments of plague when the body social was under assault—was not of course surprising in a society in which an established Church retained

[101] Chaunu, *Mort à Paris*, 327.

[102] C. Carrière, M. Courdurié, F. Rebuffat, *Marseille, ville morte* (Marseilles, 1968), 124.

[103] D. W. Amundsen, 'Canon Law on Medical and Surgical Practice by the Clergy', *Bulletin of the History of Medicine*, 52 (1978), 39–56; and id., 'The Medieval Catholic Tradition' in id. and R. L. Numbers (eds.), *Caring and Curing: Health and Medicine in the Western Religious Traditions* (New York, 1986); Isambert, xx. 573–4 (royal declaration, 8 Mar. 1712). See also below, Ch. 8, Sect. A.

[104] Cited in Vovelle, *Mourir autrefois*, 50.

unparalleled wealth and status, and in which the reigning dynasty subscribed to a divine right form of monarchy. The religious imprint was all the stronger, moreover, in what was a period of religious vitality and dispute. There was a religious discourse on healing which emphasized the role of the Church in securing cure and consolation. Prominent among ecclesiastically endorsed healing practices, for example, were pilgrimages and the associated cult of saints.[105] Some pilgrimage sites were national (Mont-Saint-Michel, Saumur, Saint-Méen, Chartres, Rocamadour, Le Puy, etc.) and even international (Rome, Compostela, etc.) in their scope, but for every major site there were hundreds of minor and local ones—there were ninety, for example, in the Basse-Marche, and nearly a thousand in Brittany alone. The shrines and the saints associated with these sites could be invoked for all kinds of issues—the wish for a husband, fertility, the recovery of stolen objects—but the quest for the cure of the physical body through divine medicine was one of the stock pilgrimage themes. Indeed, healing, usually for chronic ailments, lasting health conditions, or accidents, made up perhaps between two-thirds and three-quarters of all recorded miracles.[106]

ILLUSTRATION 2. Scene from the life of St Roch, *c.*1580–1620. This painting, from a predella situated in a chapel or hospital in the Pyrenees, contains scenes from the life of St Roch, patron saint of plague. It takes the form of classic ex-voto: inmates in a plague hospital are woken at night by a vision of St Roch, complete with his faithful dog companion, answering their prayers by coming to save them.

[105] For the cult of saints, see esp. Lebrun, *Médecins, saints et sorciers*, 113 ff.; P. Delaunay, *La Médecine et l'Église: Contribution à l'exercice médical par les clercs* (Paris, 1948); L. Maître, 'Les Saints guérisseurs et les pèlerinages en Armorique', *Revue de l'histoire de l'Église de France*, 8 (1922), 304–19, 430–40; and A. Franklin, *La Vie privée d'autrefois: Les Médecins* (Paris, 1892), esp. 220–53.

[106] See e.g., J. Delumeau (ed.), *La Mort des pays de cocagne: Comportements collectifs de la Renaissance à l'âge classique* (Paris, 1976), 23; J. Gélis and O. Redon (eds.), *Les Miracles, miroirs des*

There was a kind of division of labour among saints, whereby certain saints were reputed to be particularly efficacious for certain maladies. This association might be based on some episode in the saint's life story: St Laurent, for example, had been burnt alive, and was thus viewed as good for burns; St Erasmus had had his entrails torn out by torturers and remained the patron-saint of stomach aches; the plague saint, St Roch, had himself suffered the plague; while St Sebastian had died pierced with arrows which emblematized the divine arrow with which God penetrated the Christian community in a plague attack. Links were sometimes merely by punning and assonance: St Mamand was good for illnesses of the breasts (*mamelles*), St Méen, for illnesses of the hand (*main*); St Cloud for abcesses and boils (*clous*); and St Corneille for animals with horns (*cornes*: for animals had patron saints too—St Roch doubled up as saint for dogs).[107] Some illnesses were commonly identified by their saintly healer: thus ergotism was *le mal de Saint-Antoine*, cancer *le mal de Saint-Gilles*. Nothing testified better to the French dynasty's claims to quasi-divine status than their power, attested from the twelfth century, to cure by their touch 'the king's evil' (scrofula or *écrouelles*).[108] The list of saints addressed far outran those canonized: local legend had it that there were 2,727 saints buried in the cemetery of Lanrivoaré in Brittany alone, and unorthodox saints included the bearded female St Wilgeforte, and the martyred greyhound St Guinefort (whose cult was practised in Sandrans in Bresse).[109] Every sort of malady was taken into account, and a thorough compilation undertaken by a nineteenth-century *érudit* (see Table 1*c*) reveals the breadth of coverage. It may be taken as a crude barometer of anxiety about the most common medical conditions and maladies prevalent in early modern France.

As with the collective forms of piety linked with plague outbreaks, individuals suffering chronic sickness viewed their symptoms as 'harbingers of God's ire', divine messages calling for purification and repentance, and so sought the intercession of favoured saints as a means of propitiating God. A series of ritual acts accompanied the invocation of a saint: a pilgrimage, for example, had to be

corps (Paris, 1983), 55 ff. The proportion of healing miracles could be higher still: 85% at the shrine of the Virgin at Marienthal between 1651 and 1681, according to L. Châtellier, *Tradition chrétienne et renouveau catholique dans le cadre de l'ancien diocèse de Strasbourg (1650–1770)* (Paris, 1981). The figures of healing sites in Brittany are from *c.*1900, but may be regarded as representative of the early modern period: J. P. Goubert and R. Rey (eds.), *Atlas de la Révolution française*, vii. *Médecine et santé* (Paris, 1993), 34.

[107] J. de Viguerie, 'Le Miracle dans la France du XVIIe siècle', *Dix-Septième siècle*, 35 (1983), 313–31.

[108] M. Bloch, *The Royal Touch: Sacred Monarchy and Scrofula in England and France*, Eng. trans. (London, 1973).

[109] For this topic, see Franklin, *Médecins*, 220–53; Delaunay, *Médecine et l'Église*, esp. 23; and J. C. Schmitt, *The Holy Greyhound: Guinefort, Healer of Children since the Thirteenth Century* (Cambridge, 1982).

completed with a certain round of prayers, processions, incantations, fasts and vigils, and so on. Some of the procedures were folkloric in the extreme—the sick person had to stick his or her head into the crypt coffin of St Urloch in Quimperlé, for example—and may have originated in Gallo-Roman rites: many saints' shrines were located on top of pre-Christian holy wells, and drinking

TABLE 1c. *Number of intercessory saints in cases of illness*

Sickness	No. of saints
Fevers	123
Childhood illnesses	85
Dangers of childbirth	70
Plague	53
Illnesses associated with the head	49
Eye illnesses	47
Epilepsy	37
Conjugal sterility	27
Insanity	24
Gout	23
Toothache	20
The stone	20
Hernias	19
Colic	18
Rabies	17
Paralysis	16
Scrofula	15
Rheumatism	15
Scabies	14
Bloody flux	12
Leprosy	12
Dropsy	11
Convulsions	10
Others	less than 10 each

Source: A. Franklin, *La Vie privée d'autrefois: Les Médecins* (Paris, 1892), 221–3, citing L. Du Broc de Segange, *Les Saints patrons des corporations et protecteurs spécialement invoqués dans les maladies et les circonstances critiques de la vie* (Paris, 1888).

spring water or being immersed in it were frequent parts of the ritual. Indeed, there were times when it appeared that the Catholic theology of intercession merged into a pre-Christian pantheism: it was widely believed, for example, that saints could cause their patronized illness as well as cure it. The Devil, operating through witches who performed *maleficium* ('damage at a distance') on their fellow-villagers, seemed to harness supernatural powers for harmful purposes,

but saints too could be vindictive. The outbreak of plague in Quimper in 1638 was widely viewed as resulting from a drunkard breaking the arm of a statue of St Corentin; only when the statue was restored did the disease cease. Thus too King Henry V of England had died of 'bloody flux' in 1422 contracted after sacking the monastery of St Fiacre (the patron saint of haemorrhoids) at Meaux.[110]

By the late seventeenth century many ecclesiastics were viewing much of the extraordinarily florid set of beliefs and practices surrounding the cult of saints as popular superstitions lacking in spiritual legitimacy and sanctioned only by tradition. Jean-Baptiste Thiers's justly famous *Traité des superstitions*, published in 1679, is a good example of a burgeoning genre, targeted at the heart of what the archbishop of Sens in 1658 had called 'the relics of paganism and inventions of the demon'.[111] Yet it would be wrong to accept this view, which has been widely endorsed by historians of popular culture, as an accurate depiction of either the past or the present. Although churchmen in the late seventeenth century spoke out against practices which they had always condemned—magical incantations, sorcery, fertility rites like women rubbing themselves against menhirs, and so on—many of the practices now excoriated had in fact been traditionally endorsed by the church. Moreover, the ancient cult of saints had been given a shot in the arm by the Counter-Reformation. Post-Tridentine Catholicism produced numerous new accretions to such beliefs and practices. 'Show us your miracles' was the missionary's cry when confronted by sceptical Protestants.[112] A golden age of the saint's relic opened up,[113] and a range of miraculous beliefs and practices blossomed. The ideological campaigns surrounding monarchs touching for the king's evil were a case in point. The cult of the miraculous was promoted assiduously in religious publishing too. The widely read Bibliothèque bleue, for example, the cheap collection of almanacs, chap-books, amazing tales, and saints' lives, which from the early seventeenth century onwards reached out into the most far-flung villages of rural France, articulated a frankly magico-miraculous version of religion—but one with a clearly

[110] J. Delumeau, *La Peur en Occident (XIVe–XVIIIe siècles)* (Paris, 1978), 62. Despite the explosion of research on European witchcraft in recent years, France is still poorly served in this domain. While awaiting the promised synthesis of Robin Briggs, see A. Soman, *Sorcellerie et justice criminelle: Le Parlement de Paris (XVIe–XVIIIe siècles)* (Brookfield, Vt, 1992).

[111] See the analysis of Thiers's important work in F. Lebrun, 'Le "Traité des superstitions" de Jean-Baptiste Thiers: Contribution à l'ethnographie de la France au XVIIe siècle', *Annales de Bretagne*, 83 (1976), 443–65.

[112] G. Hanlon, 'Piété populaire et intervention des moines dans les miracles et les sanctuaires miraculeux en Agenais-Condomois au XVIIe siècle', *Annales du Midi*, 97 (1985), 119. See too esp. de Viguerie, 'Miracle'; Lebrun, *Médecins, saints et sorciers*, esp. 113 ff.; Delaunay, *Médecine et l'Église*.

[113] A. Lottin, *Lille, citadelle de la Contre-Réforme, 1598–1668* (Paris, 1984), 271.

post-Tridentine flavour.[114] Widespread practices such as the depositing at saints' shrines of ex-votos—paintings or other symbolic objects recalling the cure effected by a saint's intercession—only began around 1600.[115] The healing shrine of Sainte-Anne-d'Auray in Brittany was founded in 1625 following the accidental digging up of a statue of the virgin and the miracles which followed on from that: from 1634 to 1647 there would be practically a miracle a week on the site.[116]

The regular clergy were particularly closely associated with the publicization of new cults such as this. The fame of Sainte-Anne-d'Auray was boosted by the Capucins, while the Benedictines performed a similar function in regard to the pilgrimage site which developed from the 1630s at Notre-Dame-de-Rochefort in the diocese of Nîmes. The Cordeliers at Alise-Sainte-Reine downplayed the purely medicinal value of the waters alleged by physicians, and indeed as late as 1713 opposed the appointment of a physician at the site on the grounds that it would undermine the simple faith of pilgrims seeking a miracle. This was not a hidebound obscurantism on the Cordeliers' part, however, for they combined belief in miracles with the most up-to-date publicity techniques for the site: two massive, theatrical annual processions were organized; handbills were churned out and widely circulated; export of the waters in bottles began—the taking of waters was becoming an élite vogue under Louis XIV; and popular song vaunted the waters' value, with a refrain dismissive of the efforts of medical men ('Adieu médecins et chirurgiens, | Vous ne m'avez plus en vos liens').[117]

It would also be quite erroneous to depict widespread beliefs in the healing value of the cult of saints as simply popular. The ex-voto became widely used among the middling and poorer classes in the seventeenth and eighteenth centuries, for example, but it began as pretty much a noble and bourgeois practice. The court artist Philippe de Champaigne even painted one for his daughter, a Jansenist nun in the aristocratic milieu of the Port-Royal convent.[118] Judging by the miracles alleged to have occurred at many pilgrimage sites, the social élite

[114] R. Mandrou, *De la culture populaire aux XVIIe et XVIIIe siècles* (Paris, 1969); G. Bollème, *La Bibliothèque bleue: La Littérature populaire en France aux XVIIe et XVIIIe siècles* (Paris, 1971); and id., *La Bible bleue: Anthologie d'une littérature populaire* (Paris, 1975).

[115] B. Cousin, *Ex-Voto de Provence: Images de la religion populaire et de la vie d'autrefois* (Paris, 1981), 15 ff.

[116] Delumeau, 'Miracles de Sainte-Anne-d'Auray'.

[117] 'Farewell, then, physicians and surgeons | You have me no longer in your bonds'. M. Bolotte, *Alise Saint-Reine aux XVIIe et XVIIIe siècles* (Dijon, 1970), 22 ff., 64 ff.; R. Sauzet, 'Pélerinage panique et pélerinage de dévotion: Notre-Dame-de-Rochefort au XVIIe siècle', *Annales du Midi* (1965), 375–97. For the cult of waters, cf. E. H. Guitard, *Le Prestigieux Passé des eaux minérales: Histoire du thermalisme et de l'hydrologie des origines à 1950* (Paris, 1951).

[118] Cousin, *Ex-Voto de Provence*, 21; id., *Le Miracle et le quotidien* (Aix-en-Provence, 1983), 75–6. The predilection of Jansenists, drawn disproportionately from the social élite, for the justificatory miracle, is well known.

was disproportionately well represented among the believers: 40 per cent of miracles at Sainte-Anne-d'Auray concerned well-off town-dwellers (10 per cent nobles, 30 per cent bourgeois). Those who queued for the 'king's touch' included courtiers and foreign dignitaries. When she faced childbirth, Louis XIV's mother, Anne of Austria, had as much confidence in a relic of the Virgin's girdle as in anything the court medical establishment could offer. The queen was also an enthusiast for the miraculous powers of 'chevalier' Hubert, a direct descendant of St Hubert who like him, it was claimed, possessed the gift of healing rabies: the chevalier received royal letters patent in 1649; was in 1652 given a chapel in the Parisian parish of Saint-Eustache to practise his skills by the archbishop of Paris; in 1653 was granted a pension of 400 livres by the Estates of Brittany to tour the Breton parishes; and during his career was consulted by two kings (Louis XIII, Louis XIV), a clutch of princes of the blood, and numerous court grandees.[119]

It is also worth noting, moreover, that among members of the social élite availing themselves of the 'popular' remedy of the miraculous were individual medical practitioners. Among the 272 recorded miracles at the shrine of Notre-Dame-de-Rochefort, for example, were the cases of two surgeons, an apothecary and three doctors, including in 1641 Sanchez, professor at the Medical Faculty at Montpellier, whose cure was effected following a vow made by his wife.[120] When the saintly Capucin general Innocent de Caltagirone visited Aigues-Mortes in 1649, among the hordes who followed him everywhere was the wife of a local apothecary who, it was recorded, nearly ruined her husband's business by curing herself miraculously through drinking 'a little water in which she had soaked a patch of the habit of the reverend father'.[121] Nor should the naïve miracle-based piety of the Bibliothèque bleue be seen as the preserve solely of the popular classes. The volumes often acted as a bridge from learned culture, diffusing élite views and learned opinions, though usually in a simplified form and with a considerable time-lag. Its best sellers were those which took most seriously issues of death and salvation, and they dealt with them in ways which buttressed the post-Tridentine emphasis on the good death. Just as Madame de Sévigné and court figures lovingly collected fairytales and folk stories, moreover, so popular almanacs, pious pamphlets, and folk medical recipes were to be found on the bookshelves of the great as well as the humble.

[119] L. Gaidoz, *La Rage de Saint Hubert* (Paris, 1887), 113; F. Lebrun, 'Médecins et empiriques à la cour de Louis XIV', *Histoire, Économie et Société*, 3 (1984), 557–66, esp. 564. Cf., for Jansenist 17th-cent. miracles, the figures in D. Vidal, *Miracles et convulsions jansénistes au XVIIIe siècle: Le Mal et sa connaissance* (Paris, 1987), 174.

[120] Sauzet, 'Pélerinage panique', 395. Cf. Hanlon, 'Piété populaire', 122–3.

[121] R. Sauzet, *Contre-Réforme et réforme catholique en Bas-Languedoc: Le Diocèse de Nîmes au XVIIe siècle* (Paris, 1979), 379.

Ideas about sickness current among medical practitioners, which we will be exploring in Chapter 2, thus need to be contextualized against this broader backdrop of religious and medical *mentalités*. The dominant coloration of that backdrop was, moreover, religious rather than medical. Just as it would be wrong to separate off popular beliefs and practices relating to religion and health from those of the social élite, so it would be erroneous to make too rigid a demarcation between the religious management of health and strictly medical forms of health maintenance. There was a general compatibility between ecclesiastical and lay medical doctrines about sickness and disease. There could be competition between doctors and churchmen—occasional jostling at the bedside of the dying, for example[122]—but normally their relationship was one of mutual support and complementarity. The practice of medicine remained umbilically linked to the discipline of theology whence it had sprung in the Middle Ages, so that questions about the nature of human beings could only abut on questions relating to the nature of God. Physicians trained at universities under the aegis of the Church had ingested the theology as well as the physiology of *le mal*. They were called in as expert witnesses in cases pertaining to the sacraments: lawsuits relating to impotence leading to annulling of marriages, for example.[123] It seemed not to be hard for them to swallow the workings of the miraculous: they routinely authenticated miracles. Though they were occasionally lambasted as atheists and idolaters, preferring Hippocrates to Christ,[124] in fact it was quite possible—as Ambroise Paré did with plague—to isolate medical research into disease aetiology at the level of secondary causes from a belief in the divine origin of primary causes. Paré's famous remark on his patient—'I tended him, God cured him'—expressed this compatibility very well, as did the formula which successive kings of France used as they touched for scrofula: 'The king touches you, God heals you.'[125]

If medical practitioners had few problems about working within the wider theological framework of the Church, churchmen for their part were on the whole appreciative of the efforts of doctors and surgeons, and rarely got into the position of believing that 'the medicine of souls' made more mundane human efforts redundant. Although the Counter-Reformation produced a goodly quota of saints and mystics who scorned bodily health—the Carmelite nuns in

[122] Cf. M. C. Pouchelle, 'La Prise en charge de la mort: Médecine, médecins et chirurgiens devant les problèmes liés à la mort à la fin du Moyen Âge (XIIIe–XIVe siècles)', *Archives européennes de sociologie*, 17 (1976), 249–78.

[123] For the forensic aspects of medical practice, see esp. Jean Verdier, *La Jurisprudence de la médecine* (2 vols.; Alençon, 1762–3); and for impotence cases, P. Darmon, *Trial by Impotence: Virility and Marriage in Pre-Revolutionary France*, Eng. trans. (London, 1985).

[124] Berriot, *Athéisme et athéistes*, i. 217–18.

[125] P. Dumaître, *Ambroise Paré: Chirurgien de quatre rois de France* (Paris, 1986), 1; Bloch, *Royal Touch*.

Paris were said to live wholly from a diet of rotten eggs and water, while the embracing of plague victims and sucking the pus from the wounds of the suffering poor were familiar topoi in pious literature—in general the devout made a sharp distinction between seeking a good death and life-threatening, even suicidal, gestures.[126] Most monasteries and convents, for example, had doctors and surgeons on call. Some of the saintliest figures of the Counter-Reformation showed a commonsensical approach to the value of medicine. St Jeanne de Chantal, the founder of the Visitandine Order, wrote pressingly to her communities when plague hit Burgundy and the Lyonnais in 1628–9, urging the nuns to segregate themselves from the outside, to kill all cats, to implement measures of personal hygiene, to immerse all goods coming from outside in water, to fumigate their rooms, and so on.[127] The correspondence between Sts Vincent de Paul and Louise de Marillac, co-founders in 1633 of the Daughters of Charity, is full of statements of acceptance of God's will. But this was not fatalism: their letters are also full of recommendations about herbal remedies, tisanes, the waters of Forges, and potions for the protection of their own and their communities' health, and a manifest and cautious respect for the danger of plague.[128] St Vincent exhibited a touching faith in the healing powers of a seventh son of a seventh son—yet his library in the Saint-Lazare monastery in Paris contained numerous medical and anatomical classics.[129] St Louise's approach to medicine was similarly a delightfully pragmatic mixture of respect for the orthodox medical community and a saturation in the medical penumbra: while endlessly reiterating to the sisters the need for total obedience to physicians, she recommended, in time of plague, resort to prayers to St Roch—and even the taking of the charlatanesque antidote *orviétan*.[130]

Physicians and clerics were thus more likely to work in parallel stream than to seek out conflict. One physician made an explicit comparison between the priest and the physician:

[126] *Saint Vincent de Paul: Correspondance, Documents, Entretiens* (14 vols.; Paris, 1920–5), ed. P. Coste, x. 59–60 for the Carmelites; for the pus-sucking, cf. N. Siraisi, *Medieval and Renaissance Medicine: An Introduction to Knowledge and Practice* (London, 1990), 46 (Catherine of Siena)—and cf. C. Bynum Walker, *Holy Feast and Holy Fast: The Religious Significance of Food to Medieval Women* (Baltimore, 1987); R. Piacentini, *Origines et évolution de l'hospitalisation: Les Chanoînesses Augustines de la Miséricorde de Jésus* (Paris, 1957), 135 ff.; annual newsletter of the Filles de la Charité, 1763, held in the Archives of the Congregation of the Mission, Paris (and kindly communicated by R. P. Chalumeau).

[127] E. Dubois, 'How to Face the Plague: Some Seventeenth-Century Practices', *Newsletter of the Society for Seventeenth-Century French Studies*, 2 (1980), 29–36.

[128] e.g. *Saint Vincent de Paul*, ed. Coste, i. 29; ii. 255, 295–6, 528; iii. 378; iv. 162, etc. and, for plague, i. 133, 503; vi. 116; xiii. 280.

[129] Ibid. vi. 623; L. Laignel-Lavastine, 'La Vie médicale de Saint Vincent de Paul', *Revue des études historiques* (1930), 134.

[130] [Louise de Marillac], *Letters of Saint Louise de Marillac* (Emmitsburg, Md., 1972), letter 520; see too letters 14, 15, 133, 233, 596, 620, etc. For *orviétan*, see below, Ch. 4, Sects. A and B.

they both work to conserve health, one of the soul, the other of the body; their principles are obscure mysteries which can only be penetrated by those who devote themselves ardently to their quest; both ... prescribe things which are painful, namely work, patience, abstinence, sobriety, and temperance; both make men reflect upon their weakness and their death; and both make themselves equally hateful to the sensual and lovable to the wise.[131]

This lofty sense of medical vocation exuded a respect for the clergy which was increasingly, moreover, reciprocated. As the seventeenth century wore on, clerics showed an increasing tendency to accept medical knowledge as ancillary rather than as contradictory to the workings of divine grace. Miracles needed rigorous medical testing, not just popular acclaim. The Carmelite Dominicus a Santa Maria, who turned up in Paris in 1621, having initially practised in Lorraine, became something of a popular cult, but the Gallican doctor of theology Edmond Richer remained incredulous on the grounds that the sick did not improve and that none of the Carmelite's 'miracles' had been properly verified by a bishop, 'but have only been promoted by the insane rumour-mongering of the people and of wicked men'.[132] Clerics displayed growing wariness too regarding cases of witchcraft and diabolical possession. Although physicians and surgeons had often found for cases of diabolic possession, many of the most critical figures in the burgeoning campaign against such beliefs had been medical men—Jean Wier (or Weyer), the scourge of witch-finders not least—who ascribed the appearances of possession to melancholia. Parisian doctors in particular developed a rationalistic outlook which denied the possibility of diabolical possession, and churchmen followed them in viewing the putatively possessed as ripe for purgation rather than ecclesiastical counter-magic. There was general acceptance of the royal edict of 1682 which equated all cases of witchcraft with fraudulent pretence. The witch—erstwhile eschatological menace—had come to be seen as a charlatan.[133]

E. The Cultural Niche of Early Modern Medicine

In the present chapter, we have sketched out the patterns and the manifold representations of disease which together provided the context in which medical

[131] G. de Bezancon, *Les Médecins à la censure ou Entretiens sur la médecine* (Paris, 1677), 369.
[132] BN MS Latin 9948, fos. 493–7, from Richer's unpublished autobiography.
[133] R. Mandrou, *Magistrats et sorciers en France au XVIIe siècle* (Paris, 1968), esp. 476 ff., 512 ff. Cf. Verdier, *Jurisprudence de la médecine*, i. 246; and S. Anglo (ed.), *The Damned Art* (London, 1977). For Parisian physicians' growing scepticism, see L. W. B. Brockliss, 'Seeing and Believing: Contrasting Attitudes towards Observational Autonomy among French Galenists in the First Half of the Seventeenth Century', in W. F. Bynum and R. Porter (eds.), *Medicine and the Five Senses* (Cambridge, 1993), 80 ff.

practitioners, who are the main focus of our volume, worked and thought. It seems clear that medicine occupied a rather limited and not altogether prepossessing cultural niche in early modern France. It was squashed uncomfortably between cultural readings of disease in which medical care was either virtually unavailing (in the case of the main epidemic diseases, plague most notably) or else (with chronic diseases and long-lasting ailments) never separated from religious supplications. The terrain of disease onto which medical practitioners ventured forth was saturated with religious values, and on that terrain they competed with a rival organizational nexus—that of the Church—to which they were ultimately subordinate.

One consequence of this was that the medical practitioner, whether trained or untrained, was deemed socially and culturally inferior to the cleric and the magistrate, who were seen as more reliable and authentic guardians of order, spiritual, civil, and corporeal. Unsurprisingly, medicine was adjudged the least prestigious of the three higher sciences taught at universities—a fact symbolized by the subordinate position of the faculty of medicine (as against the faculties of theology and law) in university ceremonial rituals. The science of medicine concerned the corporeal subject (the human body), while theology dealt with God and salvation, and law with the organization of human society.[134] Medical practitioners—even physicians—used their hands too, and this only further lowered medicine's status in a society contemptuous of all forms of manual labour. Consequently, its practice was always inferior to other skilled tertiary occupations: Jean Verdier, the jurisprudentialist of Ancien Régime medicine, was later regretfully to note how, though physicians had always been the most deserving of men, 'churchmen, soldiers, lawyers, and other honourable professions' always managed to secure higher incomes.[135] Insufficiently cerebral to command absolute respect, insufficiently wealthy to occupy the highest perches, insufficiently effective to win ungrudging admiration, medicine was thus an ambiguous calling and a doubtful science to most contemporaries.

Particularly important in circumscribing the space which secular medicine occupied in sixteenth- and seventeenth-century France was the fact that, as we have seen, bubonic plague provided the standard paradigmatic model for life-threatening illnesses, retaining a perennial importance which far exceeded the demographic damage it caused (colossal though this was), and marginalizing both other infectious diseases and more chronic ailments. The shadow of the plague both within the pathosystem and within the system of collective

[134] Cf. L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), 1–2.

[135] *Jurisprudence de la médecine*, ii. 452.

representations about disease was a major determinant on what medical practitioners could, and would wish to, do. If plague could be roughly equated with death—its lethality is often not far less than 100 per cent—then cure itself seemed almost beyond understanding. 'The same difficulty to which mathematicians are reduced for the squaring of the circle and with which chemists find themselves obstructed in their quest for transmuted gold,' noted Lamperière in his *Traité de la peste* in 1620, 'the same difficulty faces doctors who try to find the remedy for the plague.'[136] It followed logically from this situation that it was probably not worth while for most medical practitioners to risk their lives trying to cure victims of the disease—or indeed any disease with plague-like characteristics. Twentieth-century historians cheerfully can (and repeatedly do) chastise early modern physicians for therapeutic inefficacy and moral cowardice. This is the kind of game with the past in which the present always wins hands down. Fear for our lives from horrible infectious diseases is an emotion too long hidden from us (even if the AIDS experience bids fair to revive it) for us to brandish such claims to bravery. In many respects too, it is ridiculously otiose to reproach sixteenth- and seventeenth-century physicians for failing to cure victims of plague and fleeing the site of the epidemic (though many contemporaries were critical in this respect too). For doctors to seek out the epicentre of a nuclear explosion in the late twentieth century—to take a related hypothesis—would be a waste of professional skill which would be better employed away from the centre of the holocaust, perhaps on the margins where there were still lives to be saved, and in advising on administrative and policy decisions.

Analysis of the context in which early modern medicine was practised thus reveals a medical realm less extensive and less independent than that over which modern medical practitioners hold sway. The primary field of medical practice was, moreover, not the exceptional but the relatively banal. Physicians shunned the plague-wracked body, and targeted instead the less spectacular epidemics, accidents of all sorts, and the many gastric bugs and recurrent fevers to which all individuals in relatively insanitary societies are prey. From every major disease apart from plague, mortality either affected only a minority (often a tiny minority) or else took some time to arrive. Unlike plague, the history of these diseases is the story of survival, not death, of morbidity rather than mortality. It was in these rather more manageable terrains—those suffering from survivable infections and from chronic illnesses—that medical intervention was concentrated, and probably did some good. The widespread conviction that disease was embodied within the poor also made practitioners sceptical about the value of their efforts towards the sick outside the social élite—quite apart, as we shall see,

[136] Cited in J. P. Peter and J. Revel, 'Le Corps: L'Homme malade et son histoire', in J. Le Goff and P. Nora (eds.), *Faire de l'histoire: Nouveaux objets* (Paris, 1974), 181–2.

from economic factors disposing them against medicating the poor. The bodies of individuals from within the social élite suffering from survivable infections and accidents were thus the prime target of the care of the physician. If doctors still lost many patients, indeed as Molière was to point out were notorious for doing so, this reflected the fact that even the banal can be lethal—witness the horrors of perinatal mortality—and that, in the end, death was inevitable anyway. Many diseases, moreover, unlike the plague, kill slowly and painfully over weeks and months rather than hours and days, and their symptoms do not initially betray their lethality. Medical practitioners in early modern France summoned to treat such cases cannot have known whether they were confronted with a minor complaint or a dangerous illness: too many diseases begin with a high temperature, vomiting, and diarrhoea.

As far as we can tell, medical practitioners rarely looked for medical miracles of their own making, and operated quite happily within this hinterland of survivable morbidity. They largely accepted the limits of their own science, and bowed to the ineffability of divine will, as expressed by theologians. They liked occasionally rising to an intellectual challenge, it is true—medical theory was full of advice on how to cure the killer diseases and exotic ailments, as we shall see in the following chapter. On the ground, however, practitioners were more circumspect. The Reims professor La Framboisière wisely counselled physicians never to accept a hopeless case: even if it seemed heartless to tell the patient and the family that nothing could be done, bluntness was the best policy, and the most appropriate means of ensuring blamelessness and conserving reputation.[137] As we shall see, medical practitioners did for the most part follow this advice and stick pretty closely to their lasts.

That circumspection was shared, at least for most of the time, by the sick. However, when the latter or their families summoned a medical practitioner, it is difficult to believe that they did so simply for the sake of form. The sick must have hoped to be cured, however thoroughly they had ingested Counter-Reformation stoical piety. Indeed for many medical and paramedical conditions, physicians could offer appreciable comfort and aid. Contemporary satirists, moralists, and physicians frequently lamented, however, the high, even indecently high, expectations of the sick. 'There is nothing they will not do to be cured of illness,' noted Jean-Baptiste Thiers, the late seventeenth-century critic of popular superstitions: 'they care little whether it is God or the Devil who delivers them of it, as long as they are cured'.[138] Immersed in the religious world-view of their time, many of those suffering illness expected

[137] Nicolas Abraham, sieur de La Framboisière, *Les Loix de médecine, pour procéder méthodiquement à la guarison* [*sic*] *des maladies* … (Paris, 1608), 2–3.

[138] Cited in Lebrun, *Médecins, saints et sorciers*, 127.

miracles. Medical practitioners, therefore, moved in an unenviably complex cultural environment. Conditioned to believe in the limitations of their art and encouraged to be cautious about their claims, they could well, for much of the time, be confronted by optimistic clients whose expectations they were almost predestined, in a great many cases, to disappoint.

2

MEDICAL DOCTRINE

A. Medicine in the Medieval University

In the late Middle Ages, the dominant concepts of health and disease current in France were largely constructed from the medical ideas of classical antiquity, in particular the works of the Graeco-Roman physician Galen (*c.* AD 129–200). Galen had successfully married together two disparate classical traditions, namely Hippocratic observationalism and Aristotelian natural philosophy. Hippocrates (*c.* 450–*c.* 370 BC) was a Greek physician on the island of Cos whose name had been attached to a number of generally empirical studies of the symptoms, progress, and treatment of different diseases, and the relationship between health and disease and the environment. Aristotle (384–322 BC) was the foremost philosopher of the ancient world, whose works on the natural world offered causal explanations of commonplace natural phenomena in terms of the individuated forms of natural bodies, which determined their movement and activity.[1] Galen linked the two traditions by relating the symptoms of health and disease to the proper or improper functioning of the forms of the parts of the human body, and deriving therefrom a rational, rather than simply empirical, procedure for healing the body's ills.[2] Like other sciences in the late Middle Ages, however, medical science was in no way a simple analogue of its classical predecessor. Over the intervening centuries, classical medicine had been distilled in the alembic of Muslim Arab commentators, and in the late Middle Ages it was further refined by their Christian scholastic successors, as part of the general compromise, particularly associated with the Dominican Thomas Aquinas (*c.* 1225–74), which the medieval Church had negotiated with antiquity.[3]

[1] Aristotle's doctrine of form, which emphasized that a natural body was more than the sum of its parts, was a difficult concept, interpreted in various ways by later Aristotelians: see below, Sect. C, for the orthodox late medieval and Renaissance view.

[2] The fundamental Galenic treatise on practical medicine was his *Methodus medendi*. On the medical philosophy of the ancients, see *inter alia*, E. J. Edelstein, *Ancient Medicine*, ed. O. and C. L. Temkin (Baltimore, 1967).

[3] The key figures in transmitting Arabic medicine to Europe were Constantinus Africanus (d. 1086) and Gerard of Cremona. The standard study of Arabic medicine is M. Meyerhof, *Studies in Medieval Arabic Medicine: Theory of Practice*, ed. P. Johnstone (London, 1964). For medical theory in late medieval Christian Europe see most recently, N. Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (London, 1990), esp. chs. 3–5.

The institutional guardian of the intellectual inheritance of classical antiquity in late medieval Europe was the university. This institution, of which there were some eighty examples by 1500 throughout Europe, was a product of what has been called 'the Twelfth-Century Renaissance', a period from roughly 1050 to 1225 that witnessed the reintroduction into Christian western Europe of the philosophy and medicine of the Graeco-Roman era.[4] The universities traditionally offered formal, *ex cathedra*, tuition in different branches of knowledge in the form of professorial commentaries on a series of authoritative texts or compilations and syntheses, such as the Bible, the law code of Justinian, and the philosophical *œuvre* of Aristotle. The classic late medieval university was a privileged, corporative institution, founded by either the pope or emperor, with the right to give its students degrees or certificates of competence.[5] Its internal organization into separate faculties reflected the contemporary fourfold division of knowledge into the propaedeutic science of philosophy (which included logic, ethics, physics, and metaphysics) and the three so-called superior sciences of theology, law, and medicine.[6] Of these, medicine was deemed the least prestigious by dint of its subject-matter, for it dealt with a corporeal subject, the human body, not God and salvation or the organization of man in society. Medicine's lowly status was symbolized by the faculty's occupying a place to the rear of theology and law in university processions and its inferior position in debating and voting in university assemblies.

Theoretically most universities offered tuition and degrees in all four disciplines, but by the turn of the sixteenth century only a handful of institutions actually did so. Indeed, in the kingdom of France, where there were fifteen universities by 1500,[7] only five—Paris, Montpellier, Avignon (in a territorial enclave owned by the pope), Toulouse, and Caen—had operational medical faculties, and only two—Paris and Montpellier—were long-standing institutions of real significance in terms of their student numbers and teaching provision. As will be demonstrated in Chapter 3, there were just not enough medical students seeking institutionalized training at this date to support a larger establishment.[8]

[4] The most recent account of the late medieval university is H. de Ridder-Simoens (ed.), *A History of the University in Europe*, i. *Universities in the Middle Ages* (Cambridge, 1992). For the general context of their development, see C. N. L. Brooke, *The Twelfth-Century Renaissance* (London, 1969).

[5] Attachment to the university brought students a variety of personal fiscal and judicial privileges, such as the right to bring wine or beer into the university town without paying the standard tolls.

[6] Sometimes, as at Salamanca, there were two law faculties: in canon and civil law.

[7] See the map with dates of foundation in L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), 478.

[8] For a general account of the late medieval medical faculties, see N. Siraisi, 'The Faculty of Medicine', in Ridder-Simoens (ed.), *History of the University in Europe*, vol. i, ch. 11.

The medical faculties of Paris and Montpellier both dated from the late twelfth century.[9] Which of the two could claim to be the oldest French medical school remains a matter of dispute, but Montpellier, in an area of modern France brought under the control of the French king only at the turn of the fourteenth century, was the first to gain an institutional, corporate identity as a specific university faculty, when it received its earliest statutes from the cardinal-legate Conrad in 1220. The Paris school only became a recognized faculty some fifty years later. By the end of the thirteenth century both schools had developed a system of teaching and examining students, which mirrored the procedures already established in the sister faculties of arts, law, and theology, and lasted in many respects unchanged until the French Revolution. Students were expected to follow the lectures in the faculty schools for a specified number of years, and then supplicate to become bachelors of medicine. Bachelors had to demonstrate their learning by giving a series of lectures, undergoing a number of oral examinations, which included sustaining several dissertations in public, and serving a practical apprenticeship. They were then qualified to be licensed by the bishop or his representative, and received the right to practise medicine both in the local community and throughout the world (*hic et ubique*). Finally, the licentiates were incorporated into the select body of faculty doctors and bestowed with the mark of their dignity, the doctoral cap. Throughout the process of examination, candidates contributed fines to the faculty treasury and rewarded the examiners and fellow students with presents and banquets. The resident doctors formed the faculty governing body: they administered the faculty's statutes, conducted day-to-day business, presided over the examination of candidates in turn, and served as professors when elected to do so.

Whether Paris or Montpellier was the more dynamic faculty in the late Middle Ages is difficult to ascertain.[10] While the two faculties remained under the jurisdiction of separate monarchs, both seem to have thrived and drawn an international clientele. Indeed, if dynamism is measured in terms of the number of surviving manuscripts, then Montpellier had the edge. Once the southern faculty came securely under Valois control, however, in 1349, there are signs that it began to lose some of its international cachet, and in the fifteenth century Paris was definitely the more prestigious. In fact, it is possible that Paris was always the more populous and popular of the two. Of the 1,681 practitioners in

[9] For their late medieval history, see L. Dulieu, *La Médecine à Montpellier*, i. *Le Moyen Âge* (Avignon, 1975); and *Commentaires de la faculté de médecine de l'université de Paris (1395–1516)*, ed. E. Wickersheimer (Paris, 1905), introd. There is no modern account of the Paris Faculty in this period.

[10] The best comparative account is Siraisi, 'The Faculty of Medicine'. See also the information in H. Rashdall, *Universities in the Middle Ages*, ed. A. B. Emden and F. M. Powicke (3 vols.; Oxford, 1936), i. 435–7, and ii. 115–28, 135–8.

France before 1500 known to have attended a university, 1,008 went to Paris, but only 376 to Montpellier.[11]

It is not difficult to understand the greater popularity of the Paris Faculty. From the thirteenth century Paris was the capital of the most powerful kingdom in the west: in the course of the century, through the efforts of the Capetian kings of France, a single state had been created—for the first time since the Carolingians—which stretched from the North Sea and the Atlantic seaboard to the Mediterranean coast. The capital city of the Capetians was also conveniently situated to benefit from the economic expansion of the centuries before the Black Death. At the hub of an important communications network, it was equally at the heart of the fertile open fields of the Île de France and close to the widely renowned annual fairs held in the Champagne. In consequence, Paris was the largest city in western Christendom by 1300. Furthermore, it was rapidly becoming its intellectual focus. It was at the city's cathedral school and the abbey of Saint-Victor that the peculiar scholastic method of investigating problems and elucidating texts by using the tools of Aristotelian logic was invented by Peter Abelard (1079–1142) at the turn of the twelfth century; and it was at the University of Paris that Aquinas, at the end of the thirteenth century, effected the authoritative reconciliation of Christianity and antiquity.[12]

In such a stimulating environment, the Paris Medical Faculty not surprisingly attracted a larger number of students than its southern rival, for Montpellier had no such advantages. Intellectually, its university had little to offer outside the study of medicine: Montpellier was a peculiar *studia* in late medieval Europe in that the only thriving faculty was the medical one. Admittedly, this may have allowed the Montpellier Faculty a greater intellectual freedom in an age where professors had to worry about theological correctness, but this can scarcely have compensated for being part of a richer university culture. Indeed, the only advantage that Montpellier had over its northern rival, at least in the first centuries of its existence, was its propinquity to Spain and Italy and easier access to Arab medical culture.

The permanent prestige and influence of the Paris Faculty also had an important consequence for the way medical practice came to be structured in late medieval France. In the course of the thirteenth century a growing proportion of Parisian mercantile and industrial activity began to be corporatized, as the city with royal support became a *ville juré*.[13] The resident doctors of the Medical Faculty took advantage of this development to establish a dominant position in

[11] D. Jacquart, *Le Milieu médical en France du XIIe au XVe siècles* (Paris, 1981), 364–5, tables 3–4.

[12] It needs hardly be said that the history of the University of Paris and the history of late medieval philosophy are almost synonymous: see for a good introd., G. Leff, *Paris and Oxford Universities in the 13th and 14th Centuries* (London, 1968).

[13] For this concept, see below, Ch. 3, Sect. A.

medical practice in the city. On the one hand, graduate physicians claimed the right, by virtue of their formal scientific training, to monopolize medical practice in the capital, at the expense of the inchoate group of untrained healers who traditionally plied a full- or part-time trade as medical practitioners. This right seems to have been recognized by the Church as early as 1220 and received the warranty of the crown in 1271.[14] On the other hand, Faculty graduates not only attempted to establish a distinction between legal and illegal practitioners, but also effected a novel differentiation between the art of medical consultation and the art of preparing and administering remedies. Traditionally, medical practice had been a hands-on activity. However, the Faculty doctors considered themselves learned physicians. Believing they understood the cause of health and disease, they shared the contemporary Aristotelian-based disdain of the university-trained scientist for manual dexterity. Indeed, they stood on their dignity all the more in that their art, if cerebral, clearly required some contact with the patient, if only to feel the client's pulse. In consequence, while demanding a monopoly of practice, the physicians insisted that the actual task of administering remedies be left to non-university-trained subordinate practitioners, who in turn began to organize themselves into distinctive corporations of surgeons and apothecaries to establish their own monopoly rights.[15]

This distaste of the learned physicians for hands-on practice was only encouraged by the fact that the large majority of Faculty graduates were in holy orders. Before the development of university medicine, most cures had been herbally based and the Church had raised no objection to members of the regular orders especially preparing and administering potions. However, the Graeco-Romano-Arabic therapeutics taught in the university placed a new emphasis on blood-letting and surgical intervention, activities that were much less seemly for clerics. Physicians in holy orders therefore naturally practised as medical consultants, rather than surgeons or even apothecaries, a trend that accelerated after 1215 when the Church decreed that the shedding of blood by clerics (whatever the reason) was henceforth illegal.

In the course of the fourteenth and fifteenth centuries the formal differentiation of medical practitioners in the capital into consultant-physicians and their subordinate helpers became a cultural commonplace, although elsewhere in France the extent to which graduate physicians were able to claim a monopoly of medical practice in a particular town, and the degree to which their assistants

[14] *Commentaires*, ed. Wickersheimer, p. lxxii. The monopoly was later repeatedly confirmed by French monarchs in 1353, 1390, 1420, and so on: see P. Kibre, 'The Faculty of Medicine at Paris, Charlatans and Unlicensed Medical Practices in the Later Middle Ages', *Bulletin of the History of Medicine*, 27 (1953), 16–19.

[15] For fuller details, see below, Ch. 3, Sect. A. Faculty bachelors had to take an oath from 1350 not to practise surgery: *Commentaires*, ed. Wickersheimer, p. lxxvi.

were corporately organized, varied greatly from place to place.[16] The resident doctors of the Montpellier Faculty had also gained the right to control medical practice in their immediate environs by the end of the thirteenth century, for the then ruler of the town, the king of Aragon, established the Faculty's monopoly in 1272, a mere year after the French king, Philip III's grant to their Parisian colleagues.[17] Nevertheless, the emergence of a differentiated corporate medical profession was a much slower business in the southern town. It was only once Montpellier had been partially incorporated into the French realm in 1293 that the practice of physic and surgery began to be separate activities, and the development was only finalized at the turn of the fifteenth century.[18]

The course of medicine offered at Paris and Montpellier in the late Middle Ages was based on the close textual study of the Latin translations of extant *œuvres* of Galen and Arab physicians. The centre point of the course was occupied, not by a Galenic text, but by Gerard of Cremona's twelfth-century translation of the encyclopaedic *Canon* of Avicenna (980–1037), especially the parts which provided a succinct if pedestrian introduction to Galenic theory.[19] Speaking in Latin, the lingua franca of the university world, professors elucidated these texts line by line, using the techniques of scholastic logic to uncover their meaning, reconcile inconsistencies, and demonstrate their conformity with the Christianized natural philosophy taught in the faculties of arts. Like all forms of university learning, the medical course was primarily aural rather than visual. Medical knowledge was obtained not through the study of patients, but hallowed texts. Students left the faculty, not holding in their heads a series of images, but clutching in their hands the ledgers of notes they had taken down verbatim from the professorial dictation, the *lectio*. In a period when books were relatively rare and expensive, these ledgers were probably the only medical works that a physician would ever own. For this reason, the professors dictated to their students not only their commentary but the text of the canonical work on which it was based.

B. The Early Modern University and the Diffusion of Medical Knowledge

In the sixteenth and for the greater part of the seventeenth centuries Galenism continued to be the dominant medical doctrine in France. The continued

[16] See below, Ch. 3, Sect. A.

[17] It can be presumed that the royal grant was in retaliation for the move on the part of the French king which effectively stopped Montpellier-trained physicians from practising in Paris.

[18] In the 14th cent. many Montpellier-trained physicians became court doctors.

[19] For a general introd., see N. Siraisi, *Avicenna in Renaissance Italy: The* Canon *and Medical Teaching in Italian Universities after 1500* (Princeton, 1987), pt. i. For France in particular, see D. Jacquart, 'La Réception du *Canon* d'Avicenne: Comparaison entre Montpellier et Paris au XIIIe et XIVe siècles', in *Histoire de l'école médicale de Montpellier: Actes du 110e Congrès National des Sociétés Savantes tenu à Montpellier en 1985*, ii (Paris, 1985).

ILLUSTRATION 3. Jean Fernel, Frontispiece to his *Universa Medicina* (6th edn., Hanover, 1610). Fernel (1485–1558) was a member of the Paris Faculty and royal physician in the reign of Henry II. In the century after his death, his Neoplatonic synopsis of the Graeco-Roman inheritance was one of the most admired and widely circulated medical texts of the late Renaissance. The caption reads: 'The learned man displays the cure-all dripping from the head of Phoebus [-Apollo] and bestows medical help on the sick.'

importance of Galenic medical ideas in this period was scarcely surprising, for in this respect medicine was no different from other branches of secular knowledge. In the age of the Renaissance and the Scientific Revolution every science to some degree remained indebted to the Graeco-Roman inheritance. However, like other sciences too, sixteenth- and seventeenth-century medicine was dependent on its classical inheritance but not its slave. As will be seen, early modern Galenism in France, as elsewhere, was a critical, dynamic, and plastic medical philosophy which differed in important respects from its late medieval counterpart and had the capacity to absorb a host of new ideas and discoveries.[20] Some professors, notably the influential Parisian Jean Fernel (*c.*1497–1558), developed contemporary Galenism in a highly idiosyncratic direction.[21] All

[20] Although the longevity of the Galenic tradition has long been realized, little attention has been paid to its plasticity in the 16th and 17th cents. For a standard viewpoint, see O. Temkin, *Galenism: The Rise and Decline of a Medical Philosophy* (Ithaca, NY, 1973).

[21] See below, Sect. E.

the same, there can be no doubting the hegemony which the ideas of classical antiquity enjoyed throughout the period. In sixteenth- and seventeenth-century France the fundamentals of Galenic science were sanctified by tradition and the Catholic Church. In a profoundly traditionalist and religious society, individuals who broke with Galen altogether and articulated original and alternative medical ideologies always had a limited following, one chiefly found among religious nonconformists. In France, as we will see, Galenism always retained its medical authority, if not a total monopoly, by castigating its rivals for their daring novelty and drew their sting by absorbing their most fecund ideas.[22]

In the sixteenth and seventeenth centuries the faculties of Paris and Montpellier also continued to be the dominant voices in French medical discourse. Throughout this period the two faculties vied with one another for the superior role as the creators and guardians of medical tradition, a rivalry made all the more intense by the fact that in the century 1560–1660 the Paris Faculty was ardently Catholic and its Montpellier counterpart a centre of Reformed Protestantism.[23] But by the turn of the seventeenth century the two faculties were not the only significant centres of medical learning in France, for the insecurity and confessional divisions occasioned by the Wars of Religion in the years after 1560 seems to have occasioned the establishment of fully functioning teaching faculties at Catholic Toulouse and Protestant Caen, and the introduction of medical teaching for the first time at Aix and Poitiers (again respectively Catholic and Protestant) and at the new very Catholic University of Reims (founded in 1548). A century later the number of teaching medical faculties had grown once more with courses (of some description) being given in addition at Cahors, Bordeaux, and Angers and at four universities in regions recently attached to the kingdom of France: Perpignan, Douai, Dole (later Besançon), and Strasburg. In the late seventeenth century, therefore, medical study was possible at fourteen different locations within the kingdom, or fifteen, if the papal foundation at Avignon is counted as a French university.[24] There can be little doubt that Paris and Montpellier enjoyed the lion's share of

[22] See below, Sects. E and F.

[23] This rivalry became acrimonious in the 17th cent. when Montpellier graduates claimed an automatic right to practise in the capital: see below, Ch. 5, Sect. E.

[24] A further four offered medical degrees but seem to have provided no tuition: see Map 3*c*. Actually deciding when medical teaching began in any of these universities is very difficult. Information is gained from archival study (esp. at Caen) and a handful of secondary sources, notably: A. Finot, *Les Facultés de médecine de province avant la Révolution* (Paris, 1958); J. Barbot, *Les Chroniques de la faculté de médecine de Toulouse du XIIIe au XXe siècle* (2 vols.; Toulouse, 1905); G. Pery, *Histoire de la faculté de médecine de Bordeaux et de l'enseignement médical dans cette ville 1441–1888* (Bordeaux, 1888); P. Lafeuille, *La Faculté de médecine dans l'ancienne université de*

medical students but the ancillary role of the other faculties in disseminating establishment medical ideas in the seventeenth century at least should not be discounted.[25]

The expansion in teaching provision was not the only development in the way the Galenic paradigm was propagated in the course of this period. Thanks to Renaissance humanists, the medical corpus of the Graeco-Roman world was considerably extended and made available in more accurate Latin translations, with the result that the Arab texts, which had formerly been the only repository of much of the classical medical inheritance, came to seem irrelevant, their contents dismissed as imperfect renderings of the Graeco-Roman originals. In consequence, in the first half of the sixteenth century Paris and Montpellier jettisoned Avicenna and other similar compilations in favour of the newly translated Greek texts. Medical professors wished to imbibe the pure milk of the ancients.[26] By the mid-sixteenth century few would have questioned the assessment of Sébastien Colin, a physician at Fontenay-le-Comte (d. before 1578), that a doctor reared on the Arabs was even an inferior practitioner.

> These Arabists only had corrupted texts, works alien to the teaching of Galen, Hippocrates, and other Greeks, so much so that the least physician today to the extent that he has fully and truly sucked on the Greeks and translations of their works, is to be preferred to the most learned Arabist of the past, whatever the praise lavished upon him.[27]

The role of the Paris Faculty in promoting the return to the classical sources was particularly important, in that among its doctors was one of the leading Latin translators of the ancient medical texts, the humanist Guillaume Cop (d. 1536).[28] It was Paris, too, that led the way in France in building the revamped curriculum around Hippocratic, not just Galenic, texts, even if François Rabelais (*c.* 1494–1553) is renowned for having lectured on the Greek text of

Cahors (Paris, 1895); V. Laval, *Histoire de la faculté de médecine d'Avignon* (Paris, 1889); F. Lebrun, *Les Hommes et la mort en Anjou aux XVIIe et XVIIIe siècles: Essai de démographie et de psychologie historiques* (Paris, 1971), ch. 6.

[25] The central importance of Paris and Montpellier, however, was not mirrored in the pattern of graduations: see below, Ch. 3, Sect. D. Strasburg, it should be noted, was primarily a German faculty: see G. Knod, *Die alten Matrikeln der Universität Strassburg (1621–1793)*, ii. *Die Matrikeln der medicinischen und juristischen Facultät* (Strasburg, 1897).

[26] The best secondary account of the changing attitude is A. Germain, *L'École de médecine de Montpellier: Ses origines, sa constitution, son enseignement* (Montpellier, 1880), 76, 90–8.

[27] [Sébastien Colin], *Déclaration des abuz et tromperies que font les apoticaires, fort utile et nécessaire à ung chacun studieux et curieux de sa santé, composée par Maistre Lisset Benanicio*, ed. P. Dorveaux (Paris, 1901), 82–3 (1st pub., Tours, 1553). The Arabs did continue to have some supporters in France. The Montpellier professor Pierre Sanche the Elder (*c.* 1598–1658), published a *Syntagma medicum ex Avicenna* as late as 1646.

[28] For medical humanism at Paris, see the entries in Jacques-Albert Hazon, *Notices des hommes les plus célèbres de la faculté de médecine 1110–1750* (Paris, 1773), 21–30.

Hippocrates' *Prognostics* for the first time in Europe at Montpellier in 1537.[29] While in the late Middle Ages professors seem to have lectured primarily on Hippocrates' *Aphorisms*, Parisian doctors, such as Louis Duret (1527–86) and Guillaume Baillou (1538–1616), made the physician of Cos the twin-pillar of the medical curriculum, gaining renown as interpreters of most of the reconstructed Hippocratic *œuvre*.[30]

The new interest in constructing the faculty course around the original classical texts also encouraged a significant extension of the curriculum. In the late Middle Ages little had been taught besides the theory of health and disease and its treatment. Although courses in anatomy and surgery had been given at Paris and Montpellier from the mid-thirteenth century, there seems to have been no sustained enthusiasm for offering tuition in any aspect of practical medicine.[31] Significantly, the author of the most famous surgical textbook in late medieval France, Guy de Chauliac (*c.* 1298–1368), whose *Chirurgia major* was finished in 1363, was a papal physician at Avignon and not a faculty professor.[32] However, the situation radically changed in the course of the sixteenth century. Lectures in surgery and pharmacy were being given at Paris from 1506 and 1538 respectively and at Montpellier from 1514 and *c.* 1550, while in both faculties there were regular anatomy lectures from the second quarter of the century. Occasionally, too, lectures were being offered on botany, although it was 1623 before the course was officially an annual event at Paris.[33] The faculties reconstituted or founded during and after the Wars of Religion gradually followed suit: indeed, Toulouse was teaching surgery from the 1590s.[34] Yet only in 1707 were the practical medical sciences of pharmacy, anatomy, and botany, though not surgery, made a compulsory part of a medical student's training by Louis XIV.[35] Initially, wherever these new courses were established, they were given by individual enthusiasts on their own initiative. At Caen, for instance, in the mid-seventeenth century anatomy was taught voluntarily by one Gilles Gaudin, who claimed in 1652 to

[29] L. Dulieu, *La Médecine à Montpellier*, ii. *La Renaissance* (Avignon, 1979), 139–40. Rather a futile gesture for few could have followed the Greek text at that date.

[30] For these two professors, see I. M. Lonie, '"The Paris Hippocratics": Teaching and Research in Paris in the Second Half of the Sixteenth Century', in A. Wear, P. K. French, and I. M. Lonie (eds.), *The Medical Renaissance of the Sixteenth Century* (Cambridge, 1985).

[31] L. Dulieu, *La Chirurgie à Montpellier de ses origines au début du XIXe siècle* (Avignon, 1975), 36–41; and id., *Médecine à Montpellier*, i. 134–41.

[32] Ibid. 274–5, biographical note.

[33] *Commentaires*, ed. Wickersheimer, 473–8 (surgery); *Commentaires de la faculté de médecine de l'université de Paris (1516–1560)*, ed. M.-L. Concasty (Paris, 1964), p. lxvi (pharmacy) and *passim* (anatomy); BFMP MS 12, fo. 26, minute 26 Apr. 1623 (botany); Dulieu, *Chirurgie*, 55–67; A. Germain, 'L'Apothicairerie à Montpellier sous l'Ancien Régime universitaire', *Mémoires de la Société archéologique de Montpellier*, 8 (1882), 56; Germain, *École de médecine*, 30.

[34] Barbot, *Chroniques de la faculté de Toulouse*, i. 319–23.

[35] Isambert, xx. 508–17, Edict of Marly, art. 22.

have given an annual course in the subject for thirteen years.[36] But gradually courses in practical medicine were assigned, sometimes permanently, to a specifically designated professor. This development had been realized at Montpellier by the end of the sixteenth century, where a separate chair in botany and anatomy existed from 1593 and in pharmacy and surgery from 1597.[37]

This novel interest in the ancillary medical sciences was stimulated in part by the work of medical humanists. In the atmosphere of veneration for antiquity, the new Latin translations of Galen's seminal anatomical text *On the Use of the Parts*, the discovery of a hitherto unknown Galenic treatise, *On Anatomical Procedures*,[38] and the new editions of the classical botanical and surgical texts, especially of Dioscorides (*fl.* AD 50–70) and the long-neglected Hippocratic corpus, all encouraged the professors to expand the curriculum. But this was only part of the story, for many of these new texts were not available before the mid-sixteenth century.[39] Rather, the establishment of courses in pharmacy and surgery in particular reflected the faculties' desire from the turn of the sixteenth century to police not only medical theory but also the knowledge of surgical operations and the method of preparing and administering drugs, which was traditionally conveyed to the apprentice surgeon or apothecary in the privacy of his master's shop.[40] Hence, another important departure from tradition: courses in practical medical subjects, especially surgery and pharmacy, were usually given in the vernacular.

Nevertheless, it is important to emphasize that, virtually from the beginning, even the new courses in pharmacy and surgery were not just intended for the physicians' subordinates. Student physicians, it was made clear, were also expected to understand the arts of their subordinate assistants. Whether student physicians followed these new practical courses willingly is difficult to say. Some certainly did, for a number chose to sustain dissertations in surgery in the seventeenth century, such as the Montpellier student Guillaume Legerius in 1615.[41] There again, there was often friction: medical students did not want to

[36] AD Calvados 1D 965, text of notarial act.

[37] Germain, *École de médecine*, 76–8, 81–3. Details about the occupants of the Montpellier chairs and their activities are given in L. Dulieu, *La Médecine à Montpellier*, iii. *L'Époque classique* (2 pts. in 2 vols.; Avignon, 1983–6), i. 16–18, 332–62, 386–44; id., *La Chirurgie*, 85–93; id., *La Pharmacie à Montpellier de ses origines à nos jours* (Avignon, 1973), 59–66. There is a general account of the phenomenon in Brockliss, *Higher Education*, 392–4.

[38] The Paris professor Johannes Guenther of Andernach (1487–1574) was the first to provide a Latin translation of Galen's *On Anatomical Procedures* in 1531.

[39] On the surgical texts in particular, see V. Nutton, 'Humanist Surgery', in Wear, French, and Lonie (eds.), *Renaissance Medicine*.

[40] See below, Ch. 3, Sect. B.

[41] BL 1185 f 2 (1), 'An periculosiora vulnera ossium cranii quam spinalis medullae?'

mix with their social inferiors. It was for this reason, presumably, that the Paris Faculty eventually created a separate professorship in Latin surgery in 1635.[42]

The introduction of courses in the ancillary medical sciences had important consequences for the structure of medical teaching. In the first place, a new emphasis was placed on visual learning. If courses in theoretical medicine continued to be taught in the time-honoured manner of the lecture dictated *ex cathedra*, courses in practical medicine were usually more lively. Increasingly, the professorial lecture was illustrated and enhanced by the dissection of cadavers,[43] botanical demonstrations, and plant-seeking rambles in the countryside, known as *herborisations*.[44]

In the second place, the introduction of practical medical courses helped, in time, to dethrone the primacy of the textual commentary. Throughout the sixteenth century professors in practical medicine remained true to tradition and for the most part gave courses based on time-honoured authorities. Where suitable Graeco-Roman texts were not available or had not yet been edited, they commented on more recent, but equally hallowed, compilations, such as the Arab Mesvé (d. *c.*855) on pharmacy, or Chauliac on surgery.[45] By the end of the century, however, the traditional authorities, even those recently recovered, began to be displaced as classroom texts by compendia composed by the individual professor. This development reflected the fact that by then the traditional authorities, however venerable, needed updating. The discovery of the New World, the Renaissance spirit of enquiry, the increasing horrors of warfare had all contributed in the sixteenth century to an upsurge in botanical, anatomical, surgical, and even pharmaceutical knowledge which left early modern Europeans far better informed than their classical and medieval predecessors. Dioscorides, for instance, the favourite classical botanical text, had listed 600 plants, but 6,000 varieties were known by 1623. In consequence, to provide students with an up-to-date account of their subject, professors were forced to compile their own texts. Abandoning traditional authorities was particularly easy in the case of surgery and pharmacy, where there was no single authoritative classical text. Indeed, at Paris the physician Estienne Gourmelin (d. 1593), seems to have been teaching from personal compilations as early as the mid-

[42] Details in Jacques-Albert Hazon, *Éloge historique de la faculté de médecine* [*de Paris*], *16 octobre 1770* (Paris, 1773), 67–8. For evidence of friction, see Dulieu, *Pharmacie*, 59–62.

[43] From 1550 the Montpellier Faculty was obliged to conduct four dissections per year: see Germain, *École de médecine*, 30.

[44] For a good account of an *herborisation*, see Thomas Platter, *Journal of a Younger Brother: The Life of Thomas Platter as a Medical Student at Montpellier at the Close of the Sixteenth Century*, trans. and introd. S. Jennett (London, 1963), 49–51. The professor was François Ranchin (*c.*1560–1641).

[45] Mesvé or Yuhanna Ibn Masawaih was a 9th-cent. Nestorian Christian whose pharmaceutical work was first printed in Venice in 1491.

1560s.[46] Usually, however, it was only in the early seventeenth century that the change from text to textbook was generally effected. Thus, it was not until 1607 that the Paris Faculty gave its official blessing to such pedagogical daring in surgical teaching, when it specified the texts, ancient, medieval, and modern, from which professors were henceforth to draw the material for their personal lecture course.[47]

Significantly, this new way of presenting courses in practical medicine was also adopted by professors of medical theory from the mid-seventeenth century. Gradually, professors ceased to give commentaries on the traditional texts. Instead, it became customary to preface the course with an introductory series of lectures on the five parts of theoretical medicine—physiology, pathology, semiology, hygiene, and therapeutics[48]—and then to offer specialist lectures on particular themes. Thus, a student at Caen in 1649–50, André le Bidois, heard the professor Gaudin lecture on Galen's *De febrium categoriis*, and Hippocrates' *Prognostics*, but listened to his colleague Étienne de Cahaignes dictate a general (introductory?) course on medical theory (covering physiology, pathology, and semiology), and other professors give detailed lectures on specific subjects such as the history and treatment of venereal disease.[49] The reason for the extension of this method of teaching to the course in theoretical medicine is complex. In part, here too growing knowledge may have played a part, but developments in the theoretical field were minimal in comparison with those in practical medicine. Rather, the move from the text to the compilation should be seen as part of the wider contemporary interest in the dissemination of knowledge *tout court*. In the century after 1550 there was a great deal of debate about the value of teaching from textual commentaries, when the hallowed authorities were often incoherent, incomplete, or badly organized. As a result, it became commonplace in many sciences, especially philosophy, for the professorial manual to replace the traditional textual authority, so that information might be presented in an ideal order, moving from the more general to the more particular.[50]

[46] Cf. his *Synopseos chirurgicae libri sex* (Paris, 1566), a compendium drawn from Graeco-Roman and Arab sources. It was translated into French by the surgeon André Malesieu in 1571 as *Le Sommaire de toute la chirurgie*. Unfortunately, it is impossible to tell for certain whether Gourmelin dictated this text to his students.

[47] BFMP MS 10, fos. 59–61: faculty minute, July 1607. At this date Chauliac was still being used at Montpellier: see Dulieu, *Chirurgie*, 89–93.

[48] This course came to be called the *institutes* after the introductory course in civil law, composed by the Emperor Justinian. Of the five parts only hygiene requires comment. This was the science of the non-naturals, a subject given little prominence before the 18th cent.: see below, Sect. C, and Ch. 7, Sect. D.

[49] Bibliothèque de l'Arsenal (Paris) MS 970; Bibliothèque Mazarine (Paris) MS 3608: *cahiers* of Le Bidois. It is possible that De Cahaignes's course is incomplete.

[50] An obsession with method was something the ancients and moderns of the 17th-cent. philosophical world shared in common. For a general study, see W. Schmidt-Biggemann, *Topica*

In the course of the sixteenth and seventeenth centuries, then, faculty professors both extended the medical curriculum and developed new ways of presenting the growing corpus of medical knowledge. They also, thanks to the invention of the printing-press, found a means of reaching a much wider audience. In the late Middle Ages, the only books that most physicians possessed were their faculty notebooks. There was a market of some kind in medical manuscripts, but books were dear and few could afford them. Gutenberg's discovery of movable type in the 1450s revolutionized the means of communicating medical, as it did all forms of, knowledge. In the long term (for books initially were luxury toys of the rich) the new technology dramatically increased the level of book-ownership.[51] In the field of medicine, as in other sciences, it became possible for students from the early sixteenth century to own the texts on which their professors commented (thereby, of course, making the late medieval habit of dictating the text as well as the commentary redundant). More importantly, it gave professors, or their grateful students, an opportunity to present their thoughts to the wider world. From the mid-sixteenth century it became a commonplace for medical professors to go into print.[52]

The new technology allowed the literate of all backgrounds, not just medical students, to enter the classroom. Indeed, since the art of engraving developed alongside the art of printing, it was even possible for a reader in a limited way to share the visual experience of a dissection. The most famous printed anatomical text of the sixteenth century was the *De humani corporis fabrica* ('On the Structure of the Human Body'), published in 1543 by the erstwhile Paris student and Paduan professor Andreas Vesalius (1514–64). What gave the work its notoriety was not its content, but the visual impact of its plates, probably prepared by Jan Stephen van Calcar.[53] Of course, to the extent that the professors published their commentaries, and later their personal compilations, in Latin, the potential audience remained small, primarily male, professional, and university-educated. A number of physicians, however, attempted to reach a wider audience still, and published in the vernacular. The Paris-educated Lyons physician Jean Canappe was already doing this in the mid-sixteenth century, and fifty years later the development became well entrenched.[54]

Universalis: Eine Modellgeschichte humanistischer und barocker Wissenschaft (Hamburg, 1983). For the development of the textbook tradition in France, see esp. L. W. B. Brockliss, 'Discoursing on Method in the University World of Descartes's France', *British Journal for the History of Philosophy*, 3/1 (1995), 11–13.

[51] The standard account is E. L. Eisenstein, *The Printing Press as an Agent of Change* (2 vols.; Cambridge, 1979).

[52] Some published best sellers. Cf. what is said about Fernel's *Universa medicina*, below, Sect. E.

[53] C. D. O'Malley, *Andreas Vesalius of Brussels, 1514–1564* (Berkeley & Los Angeles, 1964). Vesalius studied under the Paris anatomist Jacques Sylvius (1478–1555).

[54] For an idea of the extent of vernacular publications pre-1600, see H. Stone, 'The French Language in Renaissance Medicine', *Bibliothèque d'humanisme et renaissance*, 15 (1953), 315–46.

Sometimes these vernacular publications were specifically aimed at the physicians' subordinates, the surgeons and apothecaries,[55] but in most cases they were an attempt to educate the general public. The printing-press gave physicians the opportunity to promote the value of learned over unlearned medical care,[56] and to offer advice to individuals and municipal authorities on how to deal with epidemic or other diseases. The appearance of the plague in particular was guaranteed to spawn a number of self-help manuals, such as the one published by the Paris physician Nicolas Ellain (*c.*1534–1621) in 1604.[57] These pamphlets peddled prophylactic and therapeutic information; they did not examine in any detail the physiological and pathological knowledge on which the practical advice was based. In consequence, their authors were not guilty of betraying the secrets of their trade, casting scientific pearls before the multitudinous swine. Some professors, however, were much more daring. Nicolas Abraham, sieur de La Framboisière, of Reims, for instance, was extremely keen to raise medical awareness in as wide an audience as possible. In the early seventeenth century he published a lengthy textbook in the vernacular, specifically aimed at the well-to-do man or woman in the street. Realizing that his actions might not be well accepted by his peers, he was careful to defend himself in his Latin(!) preface, arguing that as the country was full of unlearned, non-university-trained healers anyway, it was for the general good that the charlatans had access to the medical knowledge of the schools.[58]

The history of faculty medicine in the sixteenth and seventeenth centuries was therefore one of expansion as a greater number of faculties taught a broader curriculum, and transmitted their medical knowledge to a wider public. On the other hand, it must be stressed that these changes, radical though they might seem, had only a limited effect on the medical philosophy that professors and physicians espoused. As we will see in the following sections, until about 1690 faculty medicine remained in most respects fundamentally Galenic. The structural changes outlined above did not, then, undermine traditional medical

[55] As was the case of the trans. of Gourmelin's *Synopseos* referred to above, n. 46. For another ex. see the posthumously published lecture course of the Paris professor Germain Courtin (d. 1597), *Leçons anatomiques et chirurgicales* (Paris, 1612).

[56] e.g. Laurent Joubert (1529–83, Montpellier professor), *Première et seconde partie des erreurs populaires, et propos vulgaires, touchant la médecine & le régime de santé, refutez & expliquez* (Lyons, 1608), (1st pub. Bordeaux, 1578 under title *Erreurs populaires au fait de la médecine et régime de santé*). More strident publications will be discussed below, Ch. 4, Sect. A.

[57] Nicolas Ellain, *Advis sur la peste* (Paris, 1604); written for the plague epidemic of that year. Ellain hoped to some good for the public (pp. 3–5). For the phenomenon of the self-help manual, see A. Wear, 'Popularized Ideas of Health and Illness in Seventeenth-Century France', *Seventeenth-Century French Studies*, 8 (1986), 229–42.

[58] Nicolas Abraham, sieur de La Framboisière, *Les Loix de médecine, pour procéder méthodiquement à la guarison* [*sic*] *des maladies: Practiquées sur toutes sortes de malades, es* [*sic*]*consultations faites avec des plus célèbres médecins de ce temps* (Paris, 1608), pref., fo. ciii^{v}.

science. Indeed, in one case they reinforced its sway, for the emphasis in the sixteenth century on teaching from the Graeco-Roman original texts encouraged an even greater veneration for antiquity. Nor did the replacement of the commentary by the compilation really threaten this respect in the short term. The advent of the professorial compilation in theoretical medicine, as in other theoretical sciences, did not herald an age of liberation from the classical incubus. Rather, in a period obsessed with pedagogical method, it allowed professors to present classical wisdom in a more condensed and appealing manner.

Even the development of courses in the ancillary medical sciences did little to dent the ancients' authority. Although the sixteenth and seventeenth centuries witnessed a significant growth of knowledge in the field of practical medicine, the new information, at least before the publication of the *De motu cordis* ('On the Heart's Motion') of William Harvey (1578–1657) in 1628, scarcely threatened Galenic orthodoxy. Indeed, the physicians' novel enthusiasm for the practical medical sciences which led to this more detailed understanding was fired in part by a wish to confirm the observations of the ancients, not to uncover their shortcomings. This was certainly the case with anatomy, potentially the most subversive of the practical medical disciplines. As is well known, physician anatomists of the period would hold fast to Galenic beliefs in spite of the observational evidence. Vesalius, for instance, failed to find the pores in the septum by which the blood, in the Galenic theory of the heart's physiology, was transferred from the right to the left ventricle. Nevertheless, he insisted that they existed and attributed their invisibility to the artifice of the divine craftsman.[59] Admittedly, from the second half of the sixteenth century anatomists became more critical of Galen's anatomy, especially at Padua, where Realdus Columbus (*c.*1510–59) discovered the pulmonary circulation and Fabricius ab Aquapendente (*c.*1533–1619) the venal valves, though not their use.[60] But before Harvey those willing to contest the hallowed texts head-on were very few, and none could be found in France. There were a number of famous anatomists in sixteenth- and early seventeenth-century France, notably André du Laurens (1558–1609) at Montpellier and Jean Riolan the Younger (1580–1657) at Paris, both renowned for their anatomical textbooks.[61] But nobody added anything

[59] In the *De humani corporis fabrica libri septem* (Basle, 1555 edn.), Vesalius did come to the radical conclusion that the septum was impermeable, but, as historians have noted, the decision was painful: see A. G. Debus, *Man and Nature in the Renaissance* (Cambridge, 1978), 63.

[60] The contributions of the Paduan school are discussed in G. Whitteridge, *William Harvey and the Circulation of the Blood* (London, 1969), chs. 1 and 2.

[61] André du Laurens, *Opera anatomica* (Lyons, 1593); he was eventually chief physician to Henry IV; Jean Riolan the Younger, *Anthropographia* (Paris, 1618). Both works went through several edns. with new titles. Riolan was acknowledged by Harvey as 'the leader and doyen of all contemporary anatomists', when they clashed over Harvey's theory of the circulation of the blood in the mid-17th cent.: see his 'The First Anatomical Essay to Jean Riolan on the Circulation of the

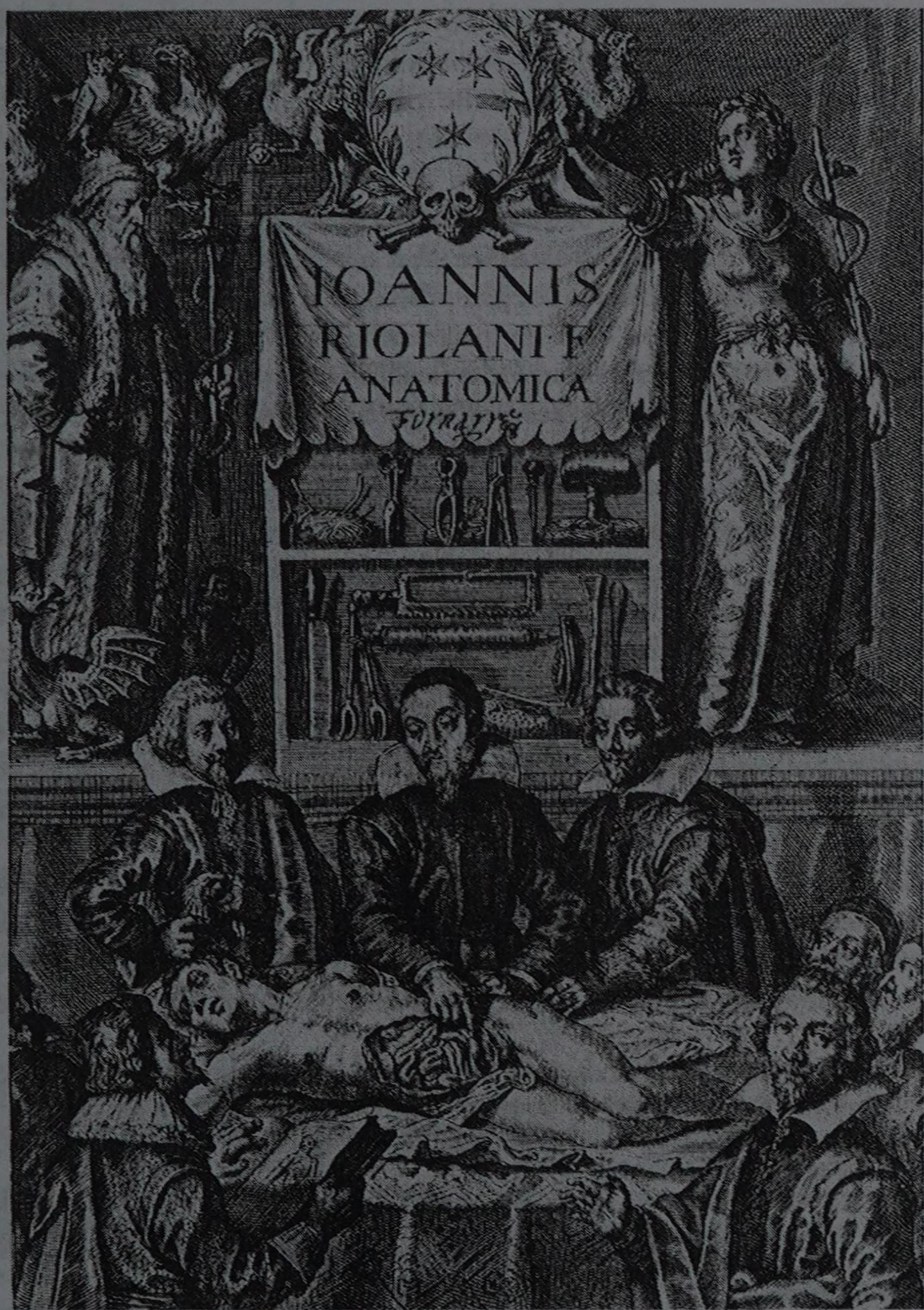


ILLUSTRATION 4. Jean Riolan the Younger, Title-page to his *Anthropographia et osteologia* (Paris, 1626). Riolan the Younger (1580–1637) was a member of the Paris Faculty from 1604 and physician to the exiled Queen-Mother, Marie de' Medici, in the 1630s. Remembered today for his hostility to Harvey's theory of the circulation of the blood, in the eyes of his contemporaries he was the most skilful anatomist in Europe. Unusually for this period, Riolan, a physician, is depicted (in the centre) touching the cadaver. The inscription reveals that the copy in the Wellcome Institute Library, London, was the gift of the author to one Tournaire (unidentified).

substantial to anatomical knowledge, beyond the discovery of an odd valve or the art of injecting dyes into the vascular system.[62] Probably the most original French anatomist in this period was the mid-sixteenth-century Montpellier professor Guillaume Rondelet (1507–66), who is remembered for his work on comparative anatomy.[63] Professors of anatomy in France, then, were certainly not attempting to dethrone the ancients, and it was not until the mid-seventeenth century, as we will see, that subversive anatomical discoveries (both pre- and post-Harvey) began to affect the faculty curriculum.[64]

It must be stressed, too, that the practical medical sciences were always a peripheral part of the curriculum. Most faculties lacked the facilities, whatever the enthusiasm of individual professors, to teach the new disciplines very effectively. The new visually orientated courses could not be taught easily in the old faculty schools, where students sat on stools in airless rooms, facing the raised professorial lectern. Anatomies and surgical operations in particular needed a new locale where students could watch the dissection, untrammelled by noisome odours. In the course of the period, therefore, all over Europe the lecture hall began to be replaced by the anatomical and botanical theatre where students stood on tiered steps overlooking a central well.[65] In France, however, progress was slow. Montpellier had an anatomical theatre of some kind from 1556, one of the first in Europe, but the Paris amphitheatre, and then only a wooden construction, was not built until 1617, while the other faculties in the seventeenth century never obtained one.[66]

Another useful, but expensive, invention of the sixteenth century, which virtually passed the French faculties by, was the botanical garden, which allowed the professor to grow the plants for his course *in situ*.[67] By the end of the seventeenth century only Montpellier had one, founded in 1593. A garden had been

Blood', in William Harvey, *The Circulation of the Blood and other Essays*, ed. and trans. K. J. Franklin (London, 1963), 123. Riolan's theory of sanguification is discussed below, Sect. F.

[62] e.g. Jacques Sylvius who was supposedly the first to use coloured injections to study the blood-vessels of the chest: see Hazon, *Notices*, 43–7.

[63] R. G. Lewis, 'Guillaume Rondelet and his Circle', D.Phil. diss., Oxford, 1961. Rondelet was author of *De piscibus marinis* (Lyons, 1555); the work still contained pictures of imaginary monsters, such as the bishop fish.

[64] See below, Sect. F.

[65] On the development of permanent anatomy theatres, see E. A. Underwood, 'The Early Teaching of Anatomy at Padua with Special Reference to a Model of the Paduan Anatomical Theatre', *Annals of Science*, 19 (1963), 1–26; and T. H. Lunsingh Scheurleer, 'Un amphithéâtre d'anatomie moralisée', in id. and G. H. M. Posthumus Meyjes (eds.), *Leiden University in the Seventeenth Century: An Exchange of Learning* (Leiden, 1975).

[66] Germain, *École de médecine*, 78–80; BFMP MS 11, fos. 121–3, 219, 223–37: an account of Riolan the Younger's pressure on the Faculty to establish an amphitheatre in the years 1614–17.

[67] The first botanical gardens were founded at Padua and Pisa: see C. B. Schmitt, 'Science in the Italian Universities in the Sixteenth and Early Seventeenth Centuries', in M. Crosland (ed.), *The Emergence of Science in Western Europe* (London, 1975), 42–3.

planted by the Paris apothecaries in the late sixteenth century (1578), but the Faculty never obtained its own foundation.[68] In the capital, admittedly, students could visit the Jardin du Roi, an institution established by the king and opened in 1641, which provided extra-faculty teaching in anatomy and botany.[69] Students elsewhere were not so fortunate.

Thus the introduction of courses in practical medicine was scarcely destabilizing ideologically. Nor was it significantly corrosive of the traditional medical hierarchy. Medical students were instructed in surgery and pharmacy to police their subordinates better, not to practise these arts personally. If medical students presented dissertations on surgery from the early seventeenth century, they argued theoretically; they were not expected to wield the knife themselves. Nothing better illustrates the physicians' traditionalist attitude to their role than the manner in which the new medical sciences were taught. Whether commenting on a classical text or reading from a personal textbook, the professor expounded *ex cathedra*. The actual task of dissecting the body or plant, or performing the surgical or pharmaceutical operation, was left to a surgeon or apothecary whose job was to keep up with the professorial narration.[70] The leading faculty anatomists, like Riolan the Younger, did dissect personally, but such commitment was uncommon enough in the early seventeenth century to be worthy of note by contemporaries.[71] Certainly until 1650 it was considered possible for a physician to profess a practical medical science with little or no hands-on experience. Not surprisingly, then, the few boundary-breaking medical students who wanted to learn the art of dissection often had to teach themselves in secret. Thus at Montpellier in the mid-sixteenth century, the Basle student Felix Platter (1536–1614) gained a personal acquaintance with anatomy by dissecting in private lodgings corpses surreptitiously purloined from local graveyards.[72]

[68] A garden of sorts was founded at Poitiers: see Germain, *École de médecine*, 76–8; P. Rambaud, *La Pharmacie en Poitou jusqu'à l'an XI* (*Bulletin et Mémoires de la Société des Antiquaires de l'Ouest*, 2nd ser. 30; Poitiers, 1906), ch. 10 (good gen. account of botanical gardens in France).

[69] For the foundation and early history of this institution, see R. C. Howard, 'Guy de la Brosse: The Founder of the Jardin des Plantes in Paris', Ph.D. diss., Cornell, 1974, chs. 2–3. By the end of the 17th cent., the Jardin du Roi was the leading centre for anatomical and botanical teaching in the kingdom. For Gui de la Brosse, see below, Sect. D.

[70] Where permanent chairs in the practical medical sciences were established, then permanent *démonstrateurs* were also appointed. This was also true at the Jardin du Roi. At Montpellier the post of *démonstrateur royal d'anatomie* was founded in 1595, two years after the anatomy and botany chair. For holders of the post, see Dulieu, *Chirurgie*, 179.

[71] e.g. BFMP MS 12, faculty minute 26 Jan. 1624 with reference to an anatomy performed by Riolan the Younger (fo. 63); the month before, minute of 21 Dec. (fo. 62), another dissection had been held in the faculty schools with the physician-professor Jean Martin merely presiding over the dissection.

[72] Felix Platter, *Beloved Son Felix: The Journal of Felix Platter, a Medical Student in Montpellier in the Sixteenth Century*, trans. and introd. S. Jennett (London, 1961), 88–9, 92–3. The dissections were carried out in the home of a Montpellier bachelor of medicine called Gallotus.

The only change in the method of disseminating faculty science which did have a subversive effect before this date was the recourse to the printing-press. While the invention of printing may have helped the faculty professors to propagate the subtleties of Galenic science more widely than ever before, it was a double-edged weapon in that the medical establishment could not maintain a monopoly over its use. The existence of the printing-press allowed the ideologically radical as well as the ideologically conservative, surgeons and apothecaries as well as physicians, indeed people from any walk of life, to find an audience for their medical ideas. The faculties could censure unpalatable publications but they could not stop their appearance or prohibit their sale. This was a power which belonged to the *parlements*, and if the courts were willing to ban politically or theologically suspect literature in the sixteenth and seventeenth centuries, they showed little inclination to outlaw heterodox medical work.

In other words, the new technology made it much more difficult than in the late Middle Ages for faculty professors to police medical knowledge. To the extent, then, that the sixteenth century saw the development of an alternative medical philosophy in the form of Paracelsianism, the printing-press, in France as elsewhere, became a vehicle not for cementing Galenic orthodoxy but undermining its authority. Paracelsian physicians and their allies, generally denied access to the faculty lectern, used the power of the printed, vernacular word with the aim of promoting a wider knowledge of their ideas, discrediting their Galenic colleagues, and winning clients.[73]

Some surgeons, too, used the printing-press subversively—not in their case to challenge the authority of Galen, for surgeon-authors were always ideologically conservative, but to raise the status of their art.[74] The advances in surgery in sixteenth- and seventeenth-century France were the achievement of a hard core of Parisian surgeons, usually members of the corporation of surgeons of Saint-Côme.[75] By publishing their own surgical textbooks they could trumpet their dexterity, parade before the public the utility of their art, and emphasize, in a society that gave greater status to the word than the deed, that surgery, and not just physic, was a learned occupation. The most famous (and deservedly so) self-publicist among the surgeons was the Parisian Calvinist Ambroise Paré, who revolutionized battlefield surgery by replacing boiling oil with simple digestives in dressing gunshot wounds and by ligating rather than cauterizing the blood-vessels of amputated limbs, thereby controlling haemorrhaging.[76] In the second half of the sixteenth century Paré published a number of works in the vernacular promoting the art of surgery, works that quickly found an audience

[73] See below, Sect. D. [74] On the surgeons' conservatism see below, n. 78.

[75] See below Ch. 3, Sect. A, for this institution.

[76] Paré has been the subject of several biographies. The most recent is P. Dumaître, *Ambroise Paré: Chirurgien de quatre rois de France* (Paris, 1986).

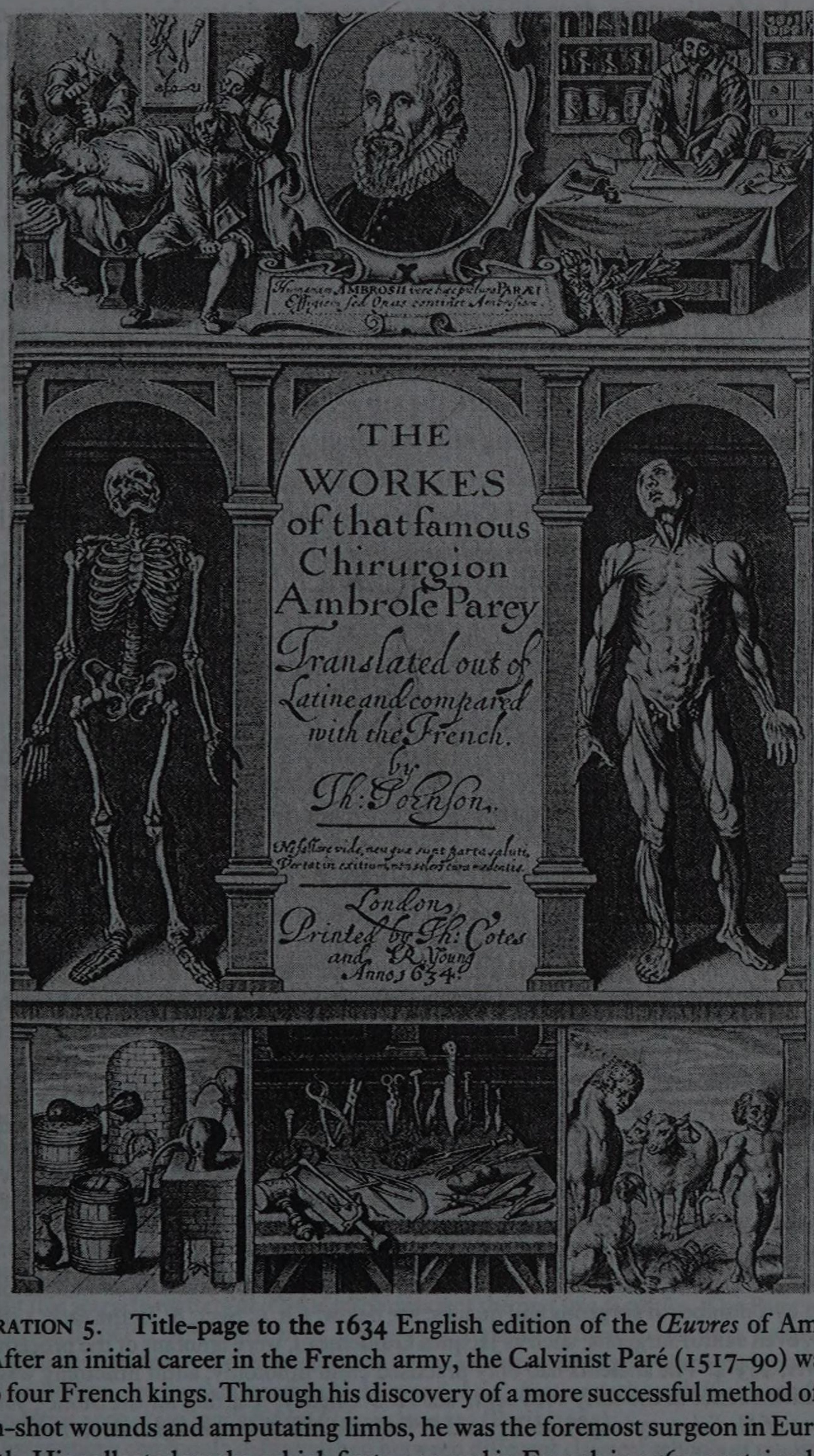


ILLUSTRATION 5. Title-page to the 1634 English edition of the *Œuvres* of Ambroise Paré. After an initial career in the French army, the Calvinist Paré (1517–90) was surgeon to four French kings. Through his discovery of a more successful method of treating gun-shot wounds and amputating limbs, he was the foremost surgeon in Europe on his death. His collected works, which first appeared in French in 1561, contained a wide variety of treatises, including one on monsters (illustrated bottom right).

outside France as well.[77] But he was only the first of several Paris colleagues who introduced the public to their innovatory instruments and techniques. Others in the first half of the seventeenth century included the pioneers of obstetrics and bronchotomy Jacques Guillemeau (1550–1613) and Nicolas Habicot (*c.* 1550–1624).[78]

None the less, even the printing-press, however much it provided a stage for alternative or critical voices, was never a serious threat either to traditional medical science or to the traditional structure of medical practice, at least in the sixteenth and the first half of the seventeenth centuries. As we will see, the number of Paracelsians in France was small and their challenge effectively met by the faculties.[79] Equally few in number were the surgeons (and apothecaries) who picked up the pen to flaunt their learning and originality. Many surgeons, who invented new operating instruments and techniques, kept the information to themselves and their families, like Laurent Colot (*c.* 1520–90) who perfected the technique of adult lithotomy in sixteenth-century France. Colot passed the secret to his heirs, eight generations of whom steadfastly refused to make public their lithotomical knowledge until 1727.[80] Even Louis XIV's surgeon, Charles-François Félix de Tassy (d. 1703), who mastered the art of closing anal fistulas and in 1686 helped to prolong the life of the 'Grand Monarque' a further thirty years, did not commit his knowledge to print. This was left, at the turn of the eighteenth century, to another Parisian surgeon, Pierre Dionis (1643–1718), whose general surgical textbook belongs to the dawn of an entirely different era.[81]

[77] Paré's first work was his treatise on gunshot wounds, *La Méthode de traicter les playes faictes par hacquebutes et aultres bastons à feu* (Paris, 1545). In the 2nd edn. (Paris, 1551), he explained how his discovery of the advantages of abandoning boiling oil came from chance: see the dedication to the then king, Henry II, sig. aaiiᵛ. Paré's *Œuvres* (1st pub. Paris, 1561) went through many edns. and was translated into Latin and other vernaculars, notably English. Paré stressed that he never trespassed on the province of physicians: see *Œuvres* (10th edn., Lyons, 1641), 'au lecteur', fos. e2ʳ–e4ᵛ.

[78] Jacques Guillemeau, *De l'heureux accouchement des femmes* (Paris, 1609); Nicolas Habicot, *La Bronchotomie* (Paris, 1620). Guillemeau was a prolific author who translated Paré's works into Latin. A collection of his own works was published as early as 1594, but the definitive edition is *Les Œuvres de chirurgie* (Rouen, 1649). Guillemeau was an arch-theoretical conservative. In his anatomy, e.g., the first work of the 1649 edn., his description of the physiology of the heart was completely Galenic: see pp. 112–19.

[79] See below, Sect. D.

[80] François Colot, *Traité de l'opération de taille* (Paris, 1727). By that date adult lithotomy was practised by a number of surgeons and quacks: see below, Ch. 9, Sect. A. In the early 17th cent., however, even skilful surgeons, such as Jacques Guillemeau, were ignorant of the procedure: see his *Œuvres*, 493–4. The ancients had only practised child lithotomy; adult lithotomy was developed outside France in the early 16th cent.: see H. S. Shelley, 'Cutting for the Stone', *Journal of the History of Medicine*, 13 (1958), 50–67; and P. Bail, *Un chirurgien urologiste du XVIᵉ siècle: Pierre Franco* (Paris, 1932).

[81] Pierre Dionis, *Cours d'opérations de chirurgie, démontrées au jardin royal* (Brussels, 1708 edn.), 280–91 (1st pub. Paris, 1707). As is evident from the title of this work, Dionis was a demon-

As a result throughout the sixteenth and seventeenth centuries the dominant conception of medicine as a science and an art was defined by the faculties, and, as the faculty professors until the final decade of the seventeenth century were Galenists of some description, then Galenism remained the establishment medical orthodoxy. From 1500 to as late as 1690 the medical philosophy taught in the French faculties was based on a set of philosophical and physiological principles, which the professors believed were the fundamentals of Galen's own medical science. Though there might well be acrimonious disputes over questions of interpretation—disputes, too, which were rehearsed in print and sought an audience beyond the faculty's walls—these underlying principles were essentially non-negotiable.[82] The professors emphasized their direct relationship with the classical past by describing themselves as dogmatics, thereby aligning themselves specifically with the Graeco-Roman medical school associated with Galen and his disciples.[83] In practice, the professors, whatever they claimed, continued to view Galen through the prism of late medieval scholasticism. Although they built their courses now round the so-called original sources, they found it difficult to discard the mental habits of their predecessors. The medical science taught in the faculties down to the last decade of the seventeenth century remained largely an amalgam of Aristotelian philosophy, Galenic medical theory, and Thomist theology, and was transmitted in a manner which combined the new textbook method of teaching with the older scholastic commentary. As the following section will show, hybrid in both form and content, university teaching looked back to the old—despite the rhetoric of hostility, even medieval Arab influences were still often detectable in their work—as well as proving able to embrace something of the new.

C. The Gospel according to Galen

Faculty medical science in the period 1500 to 1690 was ultimately based on two

strator in anatomy and surgery at the Jardin du Roi (1672–80). The closure of anal fistulas was not a new surgical operation and had been practised since classical times.

[82] Throughout the 16th and 17th cents. the most obvious source for the study of faculty Galenism is the publications of professors and faculty-educated physicians. For the 17th cent., however, our knowledge is enriched by the surviving printed abstracts of student and professorial dissertations sustained in the medical faculties of early modern France. Such dissertations, which formed the basis for oral debate, only survive in this period for Paris, Montpellier, and Caen, but this scarcely matters given the importance of the first two faculties. The Paris record is esp. good: see BFMP TMP, 9 vols. in fo., 1539–1724. As most of these theses were written by the presiding doctor/professor the value of the source as a measure of faculty teaching is obvious: for the Paris collection, see the comments in N. Legrand, *La Collection de thèses de l'ancienne faculté de médecine depuis 1559 et son catalogue inédit jusqu'au 1793* (Paris, 1913).

[83] Dissertations commonly distinguished between different classical schools of medicine and emphasized the primacy of dogmatic medicine: e.g. BFMP TMP in fo., iv, no. 711: Jean-Baptiste Ferrand, 'An secta rationalis legitima?'.

fundamental ideas of Thomist Aristotelianism.[84] In the first place, it was assumed that all natural phenomena (organic as well as inert) were composed of the twin Aristotelian principles of matter and form. However, a body's form which determined its characteristic behaviour was not a simple congeries of its material parts (as it was for some Aristotelians) but a separate immaterial substance, in some way drawn out of matter yet still a distinctive entity. Secondly, it was believed that the earth was at the centre of the universe and that there was a radical distinction between the sublunary and superlunary worlds. Above the moon natural phenomena (the stars, planets, and planetary ether) were fundamentally the same and changeless. Composed of a single, quintessential element, they were endowed with stable forms and never altered their character from the beginning to the end of the world. Below the moon, in contrast, all natural phenomena were idiosyncratic and subject to change. Comprised in different proportions of the four elements—fire, air, earth, and water—they displayed different qualities or temperaments according to their elemental balance, each element having its own peculiar form, consisting of two of the four visible qualities—hot, cold, dry, and moist. At the same time, natural phenomena were always unstable. Naturally, the region below the moon was separated into four distinct, circular zones, each filled by a single element. Natural phenomena therefore were always threatening to disintegrate as their elements attempted to find their natural position, and in consequence their idiosyncratic forms, distinct again from the forms of the material elements from which they were drawn, were inherently unstable.

Thomist Aristotelianism determined again how the faculty physicians interpreted Galen's application of Aristotelian natural philosophy to the peculiar case of mankind. On the one hand, it was accepted that human bodies were no different from other natural phenomena, except they were more complex: human beings, like other animals, were both single and composite bodies, in that they had an idiosyncratic form (their identity badge as part of nature's rich pageant), but they were also composed of four visible humours (blood, phlegm, black and yellow bile) and a myriad of solid parts, each with its peculiar elemental composition and apparently distinctive form, which determined its activity. On the other hand, the physicians rejected the materialism implicit in Galen's own medical philosophy, not just by insisting that the forms of the bodily parts were substantial and immaterial, but by maintaining that the form of the body itself was the immortal soul, which was not drawn out of matter at all; instead, it

[84] The best introduction to the fundamentals of faculty medical philosophy in this period is the textbook of the Montpellier professor Lazare Riverius (or Rivière, 1589–1655), *Institutiones medicae in quinque libros distinctae* (The Hague, 1657 edn.) (1st pub. Lyons, 1656). Riverius is the basis for the general account of 17th-cent. Galenism in L. S. King, *The Road to Medical Enlightenment* (London, 1970), 16–30.

was directly implanted by God, possibly forty days after conception.[85] Moreover, the form of the body and the forms of the bodily parts were only terminologically not really distinct, for the unique, individual soul governed all the body's functions, and the forms of the parts were its faculties, not distinctive forms. The soul's function was deemed to be threefold: it controlled growth and nutrition, sensation and motion, and rational activity.[86]

Within this Thomist Aristotelian explanatory framework, however, the detailed doctrine of physiology, pathology, and therapeutics taught in the faculty schools was unambiguously Galenic. Significantly, the new interest in some parts of sixteenth-century Europe in Aristotle's biological work, notably at Padua, left little mark on French medical science.[87] Until the penultimate decade of the seventeenth century embryological doctrine, for instance, was strictly Galenic. Human beings, it was believed, were created like other animals as a result of the fusion of two active principles: the male seed and the female menstrual blood, both said to be ejaculated in orgasm.[88] Professors thus embraced the Hippocratic two-seed theory of reproduction, not the Aristotelian alternative which maintained that only the male seed played an active role in generation.[89] Equally Galenic, at least until the 1660s, was the professors' account of sanguification. The creation of blood, it was insisted, was a perpetual

[85] This was very much a question for philosophers and theologians. There was some dispute over the forty-day rule, esp. once the Jesuits used it to justify abortion. Cf. the different accounts towards the end of the period in Pierre Gautruche (SJ), *Philosophiae ac mathematicae totius clara, brevis et accurata institutio* (6 vols.; Caen, 1665), iii. 186; and Pierre Barbay, *Commentarius in Aristotelis physicam* (2 vols.; Paris, 1675), ii. 348. Both Gautruche and Barbay were professors of philosophy.

[86] Philosophers distinguished between the vegetative, animal, and rational soul, but insisted that the human soul was one; the soul of other animals was drawn out of matter and had only vegetative and animal components.

[87] This Aristotelian renaissance was very important in the development of Harvey: see below, Sect. E.

[88] For a recent introd. to the Galenic theory of reproduction, see T. Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (London, 1992), which refers to several French authors of the 16th and 17th cents. The best general account of classical embryology in the 16th and 17th cents. is to be found in J. Roger, *Les Sciences de la vie dans la pensée française du XVIIIe siècle* (Paris, 1963), esp. 26–92. For the development of classical embryology since antiquity, see also the essays in G. R. Dunstan (ed.), *The Human Embryo: Aristotle and the Arabic and European Traditions* (Exeter, 1990).

[89] For a typical discussion, see du Laurens, *Opera anatomica*, bk. ii, ch. x and qs. xx–xxii. By the end of the 17th cent., French physicians, influenced by the embryological ideas of Harvey (see below, Sect. F), were arguing that the female seed was a separate entity from the menstrual blood, released during intercourse but not through orgasm: see the highly influential sex manual of the La Rochelle physician Nicolas Venette (1633–93), *De la génération de l'homme ou Tableau de l'amour conjugal* (8th edn., Cologne, 1716), 371–6 (1st pub. 1686 under a pseudonym). For the later popularity of the work, see R. S. Porter, 'Spreading Carnal Knowledge or Selling Dirt Cheap? Nicolas Venette's *Tableau de l'amour conjugal* in Eighteenth-Century England', *Journal of European Studies*, 14 (1984), 233–55.

process, located in the liver. From there the new blood was transferred through the venal network to feed the parts, while the blood which reached the left ventricle of the heart and was transformed into vital spirit passed through the arterial network to conserve native heat. Some of the blood, too, was used by the brain to create the invisible nervous spirits which were supposed to flow through the nervous system and be the vectors of sensation and motion. The professors' physiology, then, was the Galenic three-centred one, with primacy awarded the liver; they did not believe, like Aristotle, that the heart was the primary organ and acted as both the seat of sensation and sanguification.[90]

As Galenists, the professors believed that all human beings, with the obvious exception of monsters, were physiologically similar. They were more or less perfect, the most perfect form of the species being the adult male. In a great many respects, women were regarded as merely imperfect versions of men. The fact that the female genitalia were regarded as reversed and deficient forms of the male organs—the vagina as penis, the labia as foreskin, the uterus as scrotum, the ovaries as testicles—highlighted the extent to which women were seen as existing on the same spectrum of being as men, rather than incommensurably different.[91]

Within the basic parameters outlined above, the professors recognized there were significant differences in individual temperament or physical organization. An individual's personal physiological identity was conditioned by the relative balance of his or her bodily qualities. Individuals were labelled as sanguine (hot and moist), choleric (hot and dry), phlegmatic (cold and moist), or melancholic (cold and dry) according to their predominant temperaments, although no two individuals were exactly alike (except perhaps twins).

A number of factors governed an individual's peculiar temperament, fundamental again being the difference between men and women. Females were supposed to be colder and moister than males. In consequence their blood flowed more thickly and they had difficulty in excreting superfluous humours (or fluids): hence the necessity of menstruation and the disastrous consequences for health if a woman's menstrual cycle was abnormal.[92] A second factor was age.

[90] The Aristotelian influence was felt to a certain extent by the readiness of some students to accept that the heart, as the seat of the vital spirits, was the primary principle: e.g. anon., 'An suus cuique parti spiritus?', 1606, in BFMP TMP in fo., ii, no. 379.

[91] Laqueur, *Making Sex*, 4 and *passim*. For a blunt statement of female imperfection, see Joubert, *Erreurs*, 'Second livre de la première partie ... touchant la conception & génération', ch. 4.

[92] For a typical discussion, see BFMP TMP in fo., v, no. 818, Nicolas Colletet, 'Estne fluor muliebris semper ab utero?' (1635). In pregnancy menstrual blood was thought to feed the foetus; it therefore had a positive function, so menstruation was not normally considered a sign of female inferiority. Women were generally more prone to disease than men: see 'Tract[atus] de morbis mulierum', taken down by the Caen student André Le Bidois in the mid-17th century (Bibliothèque Mazarine MS 3608).

Children tended to be moister, the old colder and dryer, than people in their prime. As a result the old had difficulty in maintaining their natural temperament and suffered from constipation.[93]

Climate was also important. Superficially an individual's temperament was affected by the seasons of the year.[94] More importantly, temperament was linked with habitat. Classical geography divided the earth up into climatic zones, stretching from the equator to the poles. Men who lived in the torrid zone were peculiarly hot and dry, as was evident from their pygmy shape and dark skins. Conversely, those who inhabited the northernmost climes would be peculiarly cold and moist. Europeans, who dwelt in the temperate zone, were peculiarly blessed.[95] Inevitably, France was considered the best country to live in, although here too it was accepted that there was a temperamental distinction between those north and south of the Loire. According to Jean Riolan the Younger, people living between latitudes 45° and 50° were 'comfortable, idle, great meat-eaters, abundant in blood'. Further south, on the other hand, around the Mediterranean they were weaker specimens.[96]

Ultimately, what gave an individual his or her unique temperament was heredity. The two seeds, male and female, semen and menstrual blood from which a new human being was created contained the form (or germ) of every part of the father and mother. How these germs were mixed together in the womb and which became dominant determined the baby's sex and its temperament. In the opinion of some professors diseases were also passed on in this way, for a malfunctioning substantial form in a parent, which produced (say) the symptoms of epilepsy, could be transmitted through the parental seed to the offspring.[97] Not surprisingly, diseases ascribed to heredity tended to be the ones that physicians found difficulty in explaining in conventional terms and that many dismissed as occult.[98]

Significantly, no attempt was made in this period, at least after 1550, to associate an individual's temperament with his astrological birthsign. Although many professors accepted that planetary conjunctions could have a role in the

[93] e.g. 'An ova senibus salutaria?', *Quaestio medica* (3) from the series of dissertations sustained by Guillaume Legerius at Montpellier in 1615 for his doctorate, in BL 1185 f2(1).

[94] e.g. BFMP TMP in fo., ii, no. 316, Honoratus Gomer, 'An in singulis anni temporibus sua victus ratio?' (1601).

[95] e.g. BFMP TMP in fo., iv, no. 767, Germain Preaux, 'An temperamentum quarti climati optimum?'.

[96] See Jean Riolan the Younger, *Curieuses Recherches sur les escholes en médecine de Paris et de Montpellier* (Paris, 1651), 240–1.

[97] e.g. BFMP TMP in fo., ii, no. 281, Bonaventura Hachette, 'An in epilepsia *theion ti* [Greek]?' (1598).

[98] For this term see below, Sect. E. Other diseases described as hereditary were elephantiasis (i.e leprosy) and venereal maladies, and less often smallpox, arthritis, and the stone.

genesis of epidemic diseases and that the sun and the moon in particular had a general, powerful, and sometimes mysterious influence over growth and decay in the natural world, there was no suggestion that human beings were the product of the stars. In consequence, faculty professors and physicians from the early sixteenth century rejected the casting of horoscopes as both blasphemous and vain. Indeed, the complete divorce in France in this period between university medical science and astrology was perhaps the professors' most important departure from the medical philosophy taught in the faculties in the late Middle Ages. Astrology was seen as an Arabic accretion from which medical science had been rescued through a return to the Greek fount.[99]

The last French faculty physician-astrologer of note was Michel de Nostredame or Nostradamus (1503–66), who studied at Montpellier in the 1520s and spent the last twenty-five years of his life practising in the Provençal town of Salon. Nostradamus published his infamous *Centuries* or book of prophecies at Lyons in 1555, and four years later was called to court by a star-struck queen-mother, Catherine de' Medici, who was convinced the physician had predicted the recent death of her husband, Henry II, in a tournament. Despite the fame of his last years, however, Nostradamus belonged to a dying medical breed. Even in the mid-sixteenth century he was a curiosity among his peers.[100]

The professors' doctrine of disease was just as orthodoxly Galenic. The body, it was believed, became diseased when the natural complexion or temperament of one or more of its parts was disturbed by an external cause, thereby altering the part's facultative power. Any part of the body could suffer a qualitative change, but the most likely internal cause of disease was an alteration to the natural temperament of the bodily fluids, the four humours. Unnatural qualitative change to the body's parts could happen in one of three ways: as a result of a hereditary taint (as we saw); from a laceration or some form of poisoning (when the body was penetrated by an invisible and mysterious quality, as happened not just with certain animal bites but also, according to the predominant view, in the spread of many epidemic diseases);[101] or, more commonly, through an abuse of the non-naturals, the essential ingredients of healthy living.

According to the Hippocratic tradition, there were six non-naturals, whose

[99] For a good discussion, see Jacques Fontaine (d. 1621, professor at Aix), *Opera in quibus universae artis medicae secundum Hippocratis & Galeni doctrinam, partes quatuor, methodice explicantur* (Cologne, 1612), 338–41, 'An astrologiae cognitio medico sit necessaria?'. The fact that the Paracelsians and many Protestant physicians believed in judicial astrology presumably encouraged this decision; see below, Sect. D, and S. Kusukawa, *The Transformation of Natural Philosophy: The Case of Philip Melanchthon* (Cambridge, 1995), ch. 4.

[100] Learned astrologers continued to operate in court circles until the mid-17th cent. but they were generally mathematicians, such as Jean-Baptiste Morin (d. 1656), author of the posthumous *Astrologia gallica* (The Hague, 1661).

[101] See above Ch. 1, Sect. A, with regard to plague, and below, Sect. D.

good or bad management (in the light, of course, of one's individual temperament) maintained the body in a state of health or provoked disease. These were air, food and drink, exercise (including sexual activity) and rest, sleep and wakefulness, bodily evacuations, and the passions of the soul. Unnatural abstinence but more especially immoderate indulgence (gluttony, over-exercise, anger, sexual athleticism, and so on) were the sure harbingers of disease. Hunting to excess, for instance, could raise the body's temperature, preternaturally heat the heart (already a hot organ), and precipitate fever.

The internal site and nature of the disease were deduced from the visible symptoms displayed by the patient, such as the strength of his pulse, nature of his excrement, and tint of his skin. Thus, according to the Reims professor La Framboisière, 'a lemon-yellow colour' indicated 'a blockage of the liver; a brown complexion an obstruction of the spleen; a black tongue, an ardent fever; hooked nails, phthisis; red cheeks, peripneumonia'.[102] Properly interpreting the signs, however, was not always easy, the pulse in particular being a difficult diagnostic.[103] A successful reading was usually thought to depend on direct observation, taste, or touch, not any deeper analysis of excrement or the bodily fluids. A Paris student, François Mandat, in 1617, for instance, had no time for those who thought information could be gained from weighing or distilling a patient's urine. What was significant was its consistency, which could be judged on direct inspection.[104]

The degree of danger to the patient and the appropriate course of treatment was deemed to depend on a variety of factors: the position of the heavens (to a very minor degree, of course), the time of year,[105] where the patient lived,[106] his occupation and lifestyle,[107] and above all his natural temperament (itself partly the product of his environment, as we saw). Just as individuals were healthy in individual ways, so some people were more temperamentally predisposed to disease than others. Those of a sanguine temperament were thought to be the healthiest group but within the simple fourfold distinction there was room for

[102] *Loix*, 8–10.

[103] Guillaume Legerius, 'An ab urina signum certius quam a pulsa?': from the collection cited in n. 93, above.

[104] BFMP TMP in fo., iii, no. 559, 'An urinae inspectio, certior quam pondus, et distillatio?'. Mandat was implicitly criticizing the diagnostic practices of Paracelsian physicians.

[105] Some diseases were both more prevalent and more pernicious in particular seasons, such as pleurisy in winter: e.g. BFMP TMP in fo., iii, no. 472, Egide Le Blanc, 'An pleuritides, ut hyeme frequentiores, ita periculosiores?' (1614); no. 493, Antoine Le Rat, 'An cuivis humori certo tempore dominium?' (1615).

[106] In some parts of France it was easier to cure certain maladies than in others: e.g. Louis Chaulynes, doct. diss. Montpellier 1614, pp. 20–4, under 'Assertiones', BN T31–235.

[107] Some thought peasants to be more prone to disease than the rich: see Jacobus Robethonius, 'An principum et magnatum vita longior et salubrior esse debeat quam agricolarum?', set of doct. diss., Montpellier 1635, in BL 1185 f 2(9), pp. 17–19.

infinite gradations: for instance, it was better to be moderately rather than excessively sanguineous.[108] Identifying an individual's temperament as accurately as possible, therefore, was essential for successful medical practice.

Each disease, it must be stressed, was seen as an individual event. Not only was there no consistency in the way individuals resisted the different threats to bodily health, but there was no consistency either even in the location of the consequent internal qualitative imbalance. The same internal corruption of the bodily solids or fluids could result from different external causes, and vice versa. Moreover, the location and/or character of the morbid quality could also change in the course of a disease. Thus, an unnatural humour obstructing the chest could move to the nose or bowel (a good sign) or erupt into the lungs (a bad one).[109] In consequence, the identification of the malady from which a patient was suffering was really an exercise in pigeon-holing a particular congeries of symptoms within a traditional (i.e. classical) disease category. The fact that an individual set of symptoms had been given a pathological label, such as dysentery or pleurisy, did not mean that each individual displaying all or most of those symptoms had exactly the same internal qualitative changes. Diseases in reality were individual and plastic states which could be difficult to assign within contemporary taxonomy and whose prognosis was consequently difficult to predict.

In order to cure a disease it was necessary to return the affected part to its natural state by removing the pathological quality. This could only be done by following the golden rule of Galenic therapeutics: curing by opposites. Dropsy, for instance, was the consequence of an unnaturally cold and moist humour in the abdominal cavity, and had to be reduced by remedies that were hot and dry, and caused the body to sweat profusely. As we shall see below, to fight the disease and restore a patient to health, physicians had an arsenal of dietary, pharmaceutical, and surgical weapons at their disposal. Which were chosen in a specific instance depended on the patient's strength and temperament and the physician's assessment of the virulence of the disease.[110] Many of these remedies had a classical warranty, but many too were based on Arab prescriptions and folk cures, or were a physician's own concoction. Their application, too, could not always be justified in terms of their manifest qualities. Rather, to the disgust of some physicians in the first half of the seventeenth century, they were championed because they seemed to work and were judged to cure through an occult or hidden quality, unrevealed to man.[111]

[108] e.g. general discussion in BFMP TMP in fo., ii, no. 342, anon., 'An corpus temperatum saluberrimum?' (1603).

[109] Nicolas Abraham, sieur de La Framboisière, *Canonum medicinalium liber tres* (Paris, 1595), 103b–107, 'De peripneumonia'.

[110] See below, Sect. G.

[111] On occult remedies, see below, Sects. D and E. A very full account of the principles of

Physicians were taught to proceed cautiously in applying contrary remedies for if improperly administered the cure could be worse than the disease. The chances of therapeutic miscalculation were all the greater when it was difficult to ascertain exactly the intensity of the qualitative imbalance. The Montpellier professor Laurent Joubert cited the case of a patient who was given a mild purgative in the expectation he would pass a few stools. The patient duly evacuated his bowels, but so great and unanticipated was the amount of putrid matter within him, that he did so with the violence of someone suffering from dysentery.[112] As a result, Galenists placed the emphasis on beginning with mild remedies, often relying on no more than a change of diet, and only moving to more violent treatments (such as purgatives) when the disease failed to respond.

The successful practice of medicine thus required a great degree of sensitivity, circumspection, and sophistication. Yet, however knowledgeable and careful the physician might be, there was no guarantee that his best endeavours would be crowned with success. Galenists were nothing if not therapeutic pessimists. There were several reasons for this. In the first place, because of the individuality of disease the practice of medicine was judged a particularly difficult art. The Montpellier professor Joubert described it as 'the most obscure of all',[113] while Paris students in their dissertations made frequent reference to the Hippocratic maxim 'ars longa, vita brevis'. Becoming a successful medical practitioner was thus a lifetime's occupation. Secondly, there were many maladies deemed to be virtually incurable by medical art once they had taken root, notably scrofula,[114] epilepsy,[115] phthisis, rabies, various forms of cancer, and the most virulent epidemic diseases, especially plague. Although professors and students frequently discussed how such diseases might be treated, or at least their lethal effect slowed, it was always recognized that the chances of effecting a cure were slim: hence the peculiar emphasis on prophylaxis in the case of the plague, the manuals urging people unable to flee the scourge to clean and air their houses and consume quantities of the antidote theriac.[116]

Galenic pharmacy and the manifest and occult qualities of different substances is given in Jacques Fontaine, 'Pharmacia medica generalis', in id., *Opera*, 609–761.

[112] *Erreurs*, 'Premier livre de la première partie … touchant la médecine et les médecins', 91.

[113] Ibid. 98–9.

[114] According to the Paris student François Ellain in 1600, only the king could cure scrofula: see BFMP TMP in fo., ii. no. 307, 'An a tribus externa?'.

[115] Hereditary diseases generally were often deemed incurable. Some students were ready to advocate castration to prevent a disease being passed on any further; e.g. BFMP TMP in fo., v, no. 669, François Fouque, 'Solvitne castratio elephantiasim?', 1625. Elephantiasis or leprosy hardly existed in early modern France, as we saw above, Ch. 1, Sect. B; it was categorized as a form of hereditary cancer.

[116] e.g. Nicolas Abraham, sieur de La Framboisière, 'Le Gouvernement requis en temps de peste pour se garder de sa tyrannie', included in id., *Le Gouvernement nécessaire à chacun pour vivre longuement en santé* (2nd edn., Paris, 1601), 361–83. For theriac, see below Sect. G. Most plague

Thirdly, physicians were ultimately engaged in a losing battle. Human beings were born to die; indeed from the moment that they appeared in the world they were effectively in decline. Life was sustained by two forces: a nutrient power (known as the radical humour) and a vital power (called native heat). Initially concocted from the seeds in the male and female spermetic vessels, these forces were at their purest at birth; thereafter, unfortunately, they could never be sustained in their perfect form and over time they were gradually consumed, all attempt to replenish them (through food and drink) being always to some degree flawed.[117] All that the physician could do was delay the evil day and help individuals live out their natural span. Mankind's primary problem was its tendency to exhaust its radical humour too quickly by an immoderate or inappropriate lifestyle. Joubert particularly emphasized the dangers of 'unrestrained carnal copulation at an incommodious hour'.[118] Admittedly, by a careful use of the non-naturals it might be possible to prolong life a little, even to change a deleterious temperament in a more positive, sanguineous, direction. But this was all. Human beings did not live for ever (120 years was assumed the maximum).

Moreover, however skilful, the physician was not ultimately in control. A further reason for Galenic pessimism was that it was generally thought in Catholic France that the patient had his health, like his spiritual destiny, in his own hands. Even if many physicians were in constant attendance on the great and good, there is little evidence that they played a role as hygienists, advising their patients on the art of healthy living. Every educated person was supposed to know that the key to a healthy life lay in moderation in all things, the pursuit of the Aristotelian mean.[119] In consequence, little attention was paid to hygiene by faculty professors and only one thesis, by the aspirant Montpellier professor Matthieu Chastelain (1630–59), survives on the subject from the period.[120] La Framboisière, who wrote a book on hygiene, was exceptional.[121] Physicians,

manuals were about how to avoid the disease, not how to cure it. Paré's was an exception: see his 'Livre traictant de la peste', in *Œuvres*, 539–70. But Paré was a surgeon and wrote for surgeons, and surgeons not physicians were more likely to treat plague victims, if they were treated at all; most physicians seem to have considered staying to treat the disease fruitless as well as dangerous: see the comments above, Ch. 1, Sect. E.

[117] e.g. the discussion in La Framboisière, *Gouvernement*, 29–33.

[118] *Erreurs*, 'Premier livre', 32. According to La Framboisière, *Gouvernement*, 155, the best time for copulation was after 'le premier somme', for the seed would by then be well cooked (sleep was essential for proper digestion).

[119] The importance of moderation was taught in the ethics component of the philosophy course.

[120] 'An tuenda valetudini frequens et moderatio purgatio?' Q. 12 of *Quaestiones medicinae duodecim ... propugnabit ... Matthaeus Chastelain* (Montpellier, 1659), in BN T31–259. For the perfunctory emphasis on hygiene in the faculty schools, see Riverius, *Institutiones*, bk. iv. Only pp. 328–41 are devoted to hygiene, and all but pp. 407–21 deal with one non-natural: food and drink.

[121] Work cited above, n. 116. Abraham vigorously disagreed with colleagues who thought that healthy living was a matter of commonsense.

ILLUSTRATION 6. Nicolas Abraham de La Framboisière, aged 40. Portrait appears p. 28 in his *Le Gouvernement nécessaire à chacun pour vivre longuement en santé* (2nd edn., Paris, 1601). Author of a number of works on Galenic medicine at the turn of the seventeenth century, little is known about his life beyond the fact that he was a professor of medicine at the newly founded University of Reims and physician to the duchess of Nevers. His heraldic motto is: 'Thus did ambrosia nourish'.

then, were called in to remedy disease, not prevent it. On the other hand, even when summoned to consult, the physician's ability to influence events depended greatly on the patient's cooperation. The physician's diagnosis was based not so much on his own observations as the patient's own account of his ills: the patient was responsible for explaining his symptoms, revealing his temperament, and providing a previous medical history. Indeed, the doctor's physical presence was not really needed at all, and in the seventeenth century consultation by letter was common.[122] Secondly, the physician relied totally on the patient or his family following his counsel—he had no sanctions he could bring to bear—and patients were not noted for their trustworthiness.[123] In sixteenth- and seventeenth-century France, therefore, it was the patient not the physician who set the medical agenda.

Furthermore, even if the learned physician had been correctly apprised of a patient's symptoms, had thus correctly (in his view) diagnosed the complaint and knew in principle what remedies to bring to bear, the destiny of the individual was always in the hands of God. A physician's best efforts were unavailing save under the dispensation of divine grace. If he chose, God could frustrate for his own reasons the efforts of the most talented of physicians to cure disease. The duty of the physician was to do his best, then entrust 'the issue and outcome to God, who gives and takes away, increases and diminishes the force of the said remedies, as he pleases'. As a result a physician was not to be blamed if he failed, or dismissed as ignorant. Rather, 'provided he has properly done his duty, [he] must be no less valued than if the patient had escaped'. It was a popular prejudice to assess a physician's skill by his success rate, for victory in the fight against disease (military metaphors were common) 'owes more to [the appositeness of] the hour and the grace of God, than to human knowledge'.[124] The Galenist doctor, then, was to be primarily respected for his learning and his ability to observe the fundamental principles of his art.

An absence of any guarantee of success, however, did not make the faculty physician redundant. Although God held in his own hands the skein of life, he had nevertheless decreed the existence of the science of medicine. The laws of medicine were part of the unchanging laws of nature created by God in the beginning.[125] If God did not always permit success, he certainly intended that

[122] Unfortunately, few such consultations survive before the 18th century: for the phenomenon, see L. W. B. Brockliss, 'Consultation by Letter in Eighteenth-Century Paris: The Medical Practice of Étienne-François Geoffroy', in A. La Berge and M. Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Amsterdam, 1994).

[123] It is evident that physicians were frequently crossed: see the comments in Joubert, *Erreurs*, 'Premier livre de la première partie', chs. 12–13, on trusting the physician and obeying his orders. The relationship between patient and practitioner is explored in Ch. 5, Sect. A, below.

[124] Joubert, *Erreurs*, 'Premier livre', 47, 81, and 83.

[125] La Framboisière, *Loix*, pref. Cf. also the opening words of the 1648 Paris thesis of Jean-

the learned physician should be the instrument of healing, as was made clear in Ecclesiasticus 38 where the Jews were ordered to honour the doctor of medicine. In consequence, it would be tempting God for the patient to refuse to call a physician on the grounds that medical advice might prove unfruitful. According to Joubert, such behaviour would be 'foolishly to want God to do miracles according to our whim'. Logically, people who refused to call a physician when they were sick and placed their trust in divine intervention, ought also not to bother to eat. God would keep them alive.[126] The Galenist physicians evidently believed that their art was legitimized by God. Healing the body rather than the soul, both Catholic and Protestant physicians saw themselves as the secular counterpart of the priest or minister. The physician, too, was a necessary mediator between God and man, a conduit through which God bestowed his mercy on the world.

The Galenist physicians' acceptance of their relative powerlessness helps to explain the absence of any real tension in this period between the corporative medical community and the Church.[127] It was the height of temerity to believe that any disease could be cured unless both patient and physician had done their best to attract divine benevolence. At the same time, the fact that the physician was God's chosen instrument for healing the sick ensured that his morale would remain high, despite all the setbacks. The physician's lot was depicted as hard and often thankless (the ingratitude of patients was proverbial) but it was deemed to bring its own reward: the knowledge that medicine was the most useful of all human sciences divinely created for man's earthly contentment.[128]

D. The Paracelsian Heresy

Although the medical doctrine taught in the French faculties in the sixteenth and greater part of the seventeenth centuries remained fundamentally Galenic, this does not mean that there was no alternative medical philosophy to which graduate physicians might have given their allegiance. Just as the Italian Renaissance saw the 'rediscovery' of Neoplatonic, hermetic, and atomist philosophies of the natural world, which challenged without destroying the dominant Aristotelian tradition of the late Middle Ages, so the Renaissance north of the Alps spawned an anti-establishment and anti-Galenic medical philosophy: Paracelsianism.

Baptiste Moreau, 'Medicina Dei munus, Dei manus, ... ad humanae imbecillitatis opem auxiliumque condita & edita', see BFMP TMP, vi, no. 968, 'Est-ne Hippocratis medendi methodus omnium certissima, tutissima, praestantissima?'.

[126] Joubert, *Erreurs*, 'Premier livre', ch. 4 (esp. p. 57).

[127] See above Ch. 1, Sects. D and E.

[128] Joubert, *Erreurs*, 'Premier livre', 9, where the word *contentement* is specifically used.

The Swiss physician of the first half of the sixteenth century Philippus Aureolus Theophrastus Bombastus von Hohenheim, called Paracelsus (1493–1541), was the one Renaissance medical practitioner of note to break with the traditional medical philosophy enshrined in the texts of the classical and Arab authorities. His contempt for medical tradition is best illustrated by his famous book-burning ceremony at Basle on St John's Eve, 1527, when he consigned Avicenna's *Canon* to the flames. Paracelsus was a Protestant, who shared Luther's disgust for the logomachy of the schoolmen, and disdained the putative legitimacy of university medical philosophy. He wanted to build a new science of medicine on the study of nature, just as Luther wanted to build a new theology on the study of the Word. Paracelsus insisted that physicians should rely on their eyes and ears rather than the words of the ancients, and recommended them go out into the countryside and talk to peasant healers. To this extent he can be justly called an 'empiric', a term of abuse used by early modern Galenists to describe healers whose therapies were based purely on the observation of disease rather than an understanding of its cause, and whose spiritual progenitors were deemed to be a sect of ancient Greek doctors damned by Galen for their unreflective experientialism.[129] Yet Paracelsus was never a simple empiric, for he justified the use of a wide variety of folk cures (scorned, at least in theory, by many learned physicians) with reference to a complex and idiosyncratic medical philosophy.[130]

Whereas Galenists of the sixteenth and seventeenth centuries accepted the Aristotelian division between the sublunary and superlunary world, Paracelsus insisted that the universe was homogeneous and the different aspects of creation interrelated. In particular, he placed great emphasis on the analogy between the macrocosm (the planetary universe) and the microcosm (man). The planets and the stars had their counterparts in the human organs and humours, and the maintenance of health and the cure of disease depended on the physician's ability to read the connections correctly. In contrast to the Galenists, too, Paracelsus claimed that there were only three elements—salt, sulphur, and mercury—and in consequence rejected the Galenic doctrine of disease based on a qualitative imbalance, which was derived from the Aristotelian theory of elements. In its place he developed a concept of disease as a poisonous entity. According to Paracelsus each part of the body was governed by an *archeus* (an in-

[129] On the ancient medical sects, see Thomas Sonnet de Courval, *Satyre contre les charlatans et pseudo-médecins empyriques* (Paris, 1610), 60–80. Sonnet believed that contemporary empirics were far more dangerous than their classical forebears. The faculty Galenists' hostility to empirical doctors is discussed below, Ch. 4, Sect. A.

[130] The standard account of Paracelsus's medical philosophy is still W. Pagel, *Paracelsus: An Introduction to Philosophical Medicine in the Age of the Renaissance* (Basle, 1958; corrected edn., Basle, 1982). Paracelsus may or may not have taken a medical degree at Ferrara.

dwelling spirit) which controlled its function. This was much like the Thomist Aristotelian substantial form except that it was an independent spiritual entity, not drawn out of matter. The bodily parts could become diseased or malfunction when an *archeus* was attacked or destroyed by a rival spiritual entity that entered the organism from outside and took root in its material substratum.

In his therapeutic theory, Paracelsus once again departed from Galenic tradition. Curing disease was by similars not opposites. As all creation was interrelated, the physician had to know the plants, animals, and minerals which corresponded to particular parts of the body. These could be identified through analogies of shape, size, and so on, according to the Paracelsian doctrine of signatures: a heart-shaped plant, for instance, could cure diseases of the heart. Ingested by the patient, their inner virtue fortified the *archeus* in its fight against the intruder and ensured its ultimate victory. As this inner virtue derived from planetary influences, it was important that remedies were prepared and consumed at the most auspicious moments. Most Renaissance Galenists, as we have seen, rejected astrology as an Arabic accretion to the classical medical tradition. To Paracelsus, its knowledge was essential for successful medical practice.[131] Locating the appropriate natural substance, however, was insufficient to effect a successful cure, for its peculiar medicinal virtues lay hidden within. The physician, therefore, had to release this virtue by a process of distillation or other forms of chemical analysis. The medical practitioner, then, had to be an adept of alchemy, the late medieval and Renaissance art of dissolving substances in the hope of discovering the philosophers' stone and the secret of transmuting metals to gold. An interest in alchemy again distanced Paracelsus from faculty medicine, for sixteenth- and seventeenth-century Galenists eschewed the art as another Arabic science unknown to the Greeks.[132] Equally suspect in Galenic eyes was Paracelsus's belief in the possibility of magical cures, above all his insistence that wounds could be cured by anointing the weapon which had caused them. As Thomist Aristotelians, faculty physicians believed that there could be no action at a distance without the presence of a medium through which a quality could be transferred from one body to another.[133]

Not surprisingly, given his self-confidence, Paracelsus also rejected the limitations that Galenists placed on the medical art. He was convinced that once physicians had thrown away the books of the ancients and had discovered the remedies hidden in nature, then diseases of all kinds, even the plague, could be

[131] See above, Sect. C. Many Galenists did accept connections between the macrocosm and the microcosm but this was the subject of controversy: see below, Sect. E.

[132] On alchemy in this period, see most recently, J. C. Margolin and S. Matton (eds.), *Alchimie et philosophie à la Renaissance* (Paris, 1993), and P. M. Rattanzi and A. Clericuzio (eds.), *Alchemy and Chemistry in the Sixteenth and Seventeenth Centuries* (London, 1994).

[133] As in the case of light or magnetism e.g. where the air acted as the material medium.

cured. His own medical practice, therefore, was dedicated to uncovering effective remedies for incurable ailments. Indeed, Paracelsus's confidence knew no bounds. Not only did he believe that in the future the secret of longevity would be rediscovered and men would live as long as the patriarchs of the Old Testament,[134] but he boasted his own ability to create a homunculus in a test-tube.

Paracelsus never conquered the faculties of Europe, where Galenism in some form always remained supreme until at least the mid-seventeenth century. Admittedly, medical graduates did sometimes rally to his call, but in general the faculties turned their back on a man who himself had turned his back on faculty medical science. Paracelsus was thus peculiarly dependent on the printing-press and the occasional patronage of the powerful for the dissemination of his ideas. It was only, then, once his works were published posthumously in the course of the second half of the sixteenth century, that his alternative medical philosophy began to find many supporters. Not surprisingly, Paracelsians tended to be people also attracted to alchemy and hermeticism, the highly optimistic philosophy of human improvement derived from the recently recovered writings of the Neoplatonist Hermes Trismegistus.[135] In many Protestant states Paracelsians became prominent figures at court, as many Protestant princes and theologians affected to despise traditional medical learning as much as the traditional Church.[136] But in Catholic countries, in consequence, Paracelsianism was associated with heresy and had greater difficulty gaining establishment approval. Above all in Catholic Europe, Paracelsians faced deep hostility from faculty Galenists.

Critics were incensed as much by the remedies that the Paracelsians advocated as their medical philosophy. Galenists identified drugs by their external qualities such as taste, texture, and consistency. Lemon juice, for instance, was recognizably an attenuating agent, and hence a hot remedy, even though it was cold to touch, because of its tenuous nature. Galenists argued that distillation destroyed, rather than extracted, a substance's curative virtues. They were particularly alarmed by the Paracelsians' use of chemically prepared mineral concoctions, such as antimony wine, a cordial prepared by mixing antimony powder in white wine. Paracelsus had urged the use of a number of poisonous minerals such as antimony, mercury, and arsenic on the grounds that diseases were poisons which needed to be treated by antidotes. To sixteenth-century Galenists

[134] Paracelsus wrote a treatise entitled *De longa vita*.

[135] Highly popular because Hermes was thought to be a pre-Socratic Egyptian prince who had had peculiar access to the wisdom of Moses. The *Corpus hermeticum* had been translated into Latin by Marsilio Ficino, *c.* 1460. For the most recent edition of the work in English, see *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius*, ed. B. Copenhaver (Cambridge, 1992).

[136] On Protestant and court Paracelsians, see H. Trevor-Roper, 'The Court Physician and Paracelsianism', in V. Nutton (ed.), *Medicine at the Courts of Europe 1500–1837* (London, 1990).

this was dangerous nonsense and confirmed their view that Paracelsians were atheists and murderous empirics.[137] They also objected to the Paracelsians' interest in the healing properties of natural mineral waters, a form of therapy popular (paradoxically) in classical times but generally neglected in the late Middle Ages.[138]

French supporters of Paracelsus can be found from the 1560s when a physician from La Rochelle, Loys de Launay, a graduate of Montpellier (and possibly a Protestant), promoted the use of antimony as a purgative.[139] De Launay's boldness led to the drug being banned by the Parlement of Paris in 1566 on the initiative of the Paris Faculty, but neither bastion of the Catholic establishment could prevent the rapid dissemination of Paracelsian ideas in subsequent years. In 1568 a compendium of Paracelsian philosophy and medicine was published by the Paris barrister Jacques Gohorry (under the pseudonym Leo Suavius) and other Paracelsian treatises (often translations) followed. Particularly important was the work which appeared in 1575 by Alexandre de la Tourette (profession unknown) on the use of *aurum potabile* (liquid gold) as a remedy to cure all diseases. Having rejected the qualitative idea of disease, Paracelsians no longer believed that certain remedies were only appropriate for certain diseases. Through chemical distillation they hoped to discover a quintessential extract whose virtue would contain the perfect balance of the three Paracelsian elements and counter the effect of any poisonous entity. Just as gold when refined was the purest metal, so gold, properly prepared, was the most powerful medicine.[140] Needless to say, the idea of a cure-all was a nonsense to Galenists, who believed in curing by contraries.[141]

Most first-generation Paracelsians in France were not graduate physicians. They appear to have been a rag-bag of literate and semi-literate hermeticists,

[137] For the spread of Paracelsianism and the Galenic reaction, see esp. A. G. Debus, *The Chemical Philosophy: Paracelsian Science and Medicine in the Sixteenth and Seventeenth Centuries* (2 vols.; New York, 1977); also id., *The English Paracelsians* (London, 1965). On the linkage between Paracelsianism and alchemy, see R. P. Multhauf, 'Medical Chemistry and the "Paracelsians" ', *Bulletin of the History of Medicine*, 28 (1954), 101–26.

[138] There was some interest in balneology in late medieval Italy: see R. Palmer,' "In this our lightye and learned time": Italian Baths in the Era of the Renaissance', in R. S. Porter (ed.), *The Medical History of Waters and Spas* (*Medical History*, Suppl. 10: London, 1990), 15. See also R. Jackson, 'Waters and Spas in the Classical World', ibid. 1–13.

[139] Purgatives were drugs which expelled a peccant humour from the body by promoting vomiting or opening a patient's bowels.

[140] The history of the spread of Paracelsian ideas in France is charted in A. G. Debus, *The French Paracelsians: The Chemical Challenge to Medical and Scientific Tradition in Early Modern France* (Cambridge, 1991), 17–38.

[141] For a typical Galenic view here, see Guillaume Legerius, 'An detur quinta quaedam essentia quae omnibus morbis conveniat?', Q.1 of a series of doctoral theses, Montpellier, 1615, in BL 1185 f 2(1), n.p.

drawn from a wide variety of occupational backgrounds. With a few exceptions (such as De Launay), only the apothecaries in their number had a place within the orthodox medical community. Those amongst them who practised medicine did so either on the margins of legality, or else through special legal favour and dispensation.[142] Indeed, so far as Paracelsians (or Paracelsian sympathizers) did eventually begin to appear in the ranks of qualified physicians (though not within faculty teaching staffs), they did so only through the patronage and under the protection of the royal court. Of particular importance here was the change of dynasty in 1589, for the Protestant rulers of the independent kingdom of Navarre had patronized Paracelsian healers at their tiny court at Nérac from the mid-sixteenth century. Although the first Bourbon king of France, Henry IV, converted to Catholicism in 1593 (for *raison d'état*) he maintained his family's links with alternative medicine, and kept a number of Paracelsians in his medical entourage, notably the Basle graduate Joseph Duchesne called Quercetanus (*c.* 1544–1609). Thereby, the Paracelsians managed to put down roots at the French court. Though the death of Henry IV in 1610 and his succession by the more ardently Catholic Louis XIII was a blow to the Paracelsian cause, the Paracelsian presence in court circles was never wholly extinguished. Indeed, it shone particularly brightly in the period from 1624 to 1642 when Cardinal Richelieu was at the helm of matters of state. The cardinal protected physicians with a positive interest in Paracelsian ideas, including the Montpellier graduate and gazetteer Théophraste Renaudot (1586–1653), and Gui de la Brosse (d. 1641), who was founder of the royal botanical gardens, the Jardin du Roi.[143] Indeed, thanks to the Jardin, Paracelsians in the capital found a safe billet thereafter as professors of botany and pharmacy.

Throughout the seventeenth century, therefore, there would always be learned physicians with protectors at court who rejected the faculty Galenic line. They were, moreover, only the tip of the Paracelsian iceberg, for there were many other Paracelsian sympathizers among the nobility and the liberal professions, although how many ever practised medicine rather than simply dabbled in alchemy is hard to say. Many again were Protestants (allowed, of course, to practise their faith unmolested down to 1685), but some were Catholics or Catholic converts, like the Franciscan Gabriel de Castaigne (d. *c.* 1630), a royal almoner, who published another account of *l'or potable* in 1611.[144]

[142] A number will be encountered below in Ch. 4, Sects. B and C, among the unlearned medical practitioners.

[143] La Brosse was a court doctor but Renaudot only held the honorary title of *conseiller du roi*. For their lives and works, see Howard, 'Guy de la Brosse'; and H. M. Solomon, *Public Welfare, Science and Propaganda in Seventeenth-Century France: The Innovations of Théophraste Renaudot* (Princeton, 1972). For the reaction of the Paris Faculty to the presence of Paracelsians at court, see below, Ch. 5, Sect. E.

[144] Castaigne's book was denounced by the Faculty on 18 Oct. 1611: BFMP MS 10, fo. 341. In

However, it would be wrong to exaggerate the influence of the French Paracelsians at any time in the period. If they were protected at court, they never received much, if any, significant support from within the faculties, and the faculties' dislike was shared by the legal establishment, which equally dismissed the Paracelsians as atheists. Faculty physicians, therefore, had *carte blanche* to attack Paracelsianism in print, which they did with gusto in the early seventeenth century,[145] and, in Paris at least, Faculty requests to prevent unlicensed Paracelsian physicians from practising were usually sympathetically received.[146] The Paris Parlement's attitude to Paracelsianism and all other new-fangled philosophies was made abundantly clear in 1624 when it shut down (on the request of the faculty of theology) a public debate in the capital on a series of anti-Aristotelian and atomist theses organized by the Paracelsian (graduate?) physician Estienne de Clave (d. *c.* 1650). In a famous judgement, the Parlement exiled De Clave and his colleagues from its jurisdiction (one-third of France) and forbade in the future 'any person on pain of death to hold or teach any maxim contrary to ancient and approved authors'.[147]

Seventeenth-century French Paracelsians (learned or unlearned) therefore had to survive in a permanently hostile atmosphere, even if they never went in fear of their lives.[148] In consequence, French Paracelsians who aired their doctrine in print were relatively circumspect and affected to reconcile the Galenic and Paracelsian traditions.[149] Thus, Joseph Duchesne might boast the virtues of Paracelsian medicine and believe like his master in the possibility of cheating disease,[150] but in significant respects his medical philosophy was eclectic. His elemental theory, for instance, combined both Paracelsian and Aristotelian elements by distinguishing between active and passive principles; the latter, the less important, consisting of earth, water, and air. He also insisted that the

1614 a medical student, one Étienne Chaillou, was reprimanded for associating with Castaigne: MS 11, fo. 82, minute 22 Mar. Castaigne had been raised as a Calvinist.

[145] The Paris physicians Jean Riolan the Elder (d. 1606) and Younger, wrote several pamphlets on the Faculty's behest in the 1600s: e.g. Jean Riolan the Elder, *Ad Libavi maniam ... Responsio pro censura scholae Parisiensis contra alchymiam lata* (Paris, 1606).

[146] In 1612 Castaigne was forbidden to practise by the Paris Châtelet court: BFMP MS 11, fos. 10–13, minute 7 Nov.

[147] Charles Duplessis d'Argentré, *Collectio judiciorum de novis erroribus qui ab initio duodecim saeculi ... in ecclesia proscripta sunt* (3 vols.; Paris, 1728–31), ii. 146–7. De Clave survived to become a professor at the Jardin du Roi.

[148] Had the atheist rhetoric been taken seriously, of course, then they would have suffered real persecution. In 1619 the materialist Uglio Vanini (b. 1585) was burnt at the stake in Toulouse.

[149] Information about the chemical rather than the medical doctrines of several 17th-cent. French Paracelsians can be found in H. Metzger, *Les Doctrines chimiques en France du début du XVIIe à la fin du XVIIIe siècle, première partie* (Paris, 1923).

[150] See esp. his posthumous *Le Pourtraict de la santé où est au vif réprésentée la règle universelle & particulière de bien sainement, & longuement vivre* ... (Saint-Omer, 1618).

chemical philosophy was the true medical doctrine of the ancients, declaring, somewhat disingenuously, that he was no Paracelsian.

> If *Hypocrates* or *Galen* himself, were now againe alive, they would exceedingly reioyce to see [the medical] art so inlarged & augmented by so great and noble addition, and would patronize and upholde with their owne hands, that which was hidden from the old fathers in former ages: and reiecting many of those things, which before pleased them, yeelding to reason and experience, would gladly imbrace the new.[151]

Even more ready to appease Galenic critics was Gui de la Brosse. Not only did he drop the term *archeus* in favour of one of his own invention, *artisan*, but he also rejected the macrocosm–microcosm analogy. He refused, therefore, to believe that plants (and other substances) received their medicinal virtue from the heavens. In addition, he was suspicious of the use of metallic remedies, preferring to deploy plants as medicaments on the grounds that they were much closer to man's nature and much more was known about them.[152] Consequently, his views on the dangers of metallic drugs mirrored those expressed by many faculty doctors.[153]

French Paracelsianism, then, was sometimes far closer to orthodox medical thinking than might be thought at first sight. As a result, as the seventeenth century wore on, it seemed less offensive to the medical establishment, and the attacks in print ceased.[154] In part, however, the diminishing ideological hostility between the two groups by the mid-seventeenth century reflected the fact that the Galenists in turn had begun to hold out an olive-branch. At no time in the seventeenth century did the faculty professors ever accept the fundamentals of Paracelsian medical philosophy (above all they always rejected the idea that cures were by similars), but they did come to accept the utility of many of the distillates, extracts, oils, and poisonous substances that the Paracelsians promoted as alternatives to traditional Galenic remedies.

[151] *The Practise of Chymicall, and Hermeticall Physicke, for the Preservation of Health*, trans. Thomas Tymme (London, 1605), sig. B2^{v}, a trans. of Duchesne's *Ad veritatem Hermeticae medicinae ex Hippocratis veterumque decretis* (Paris, 1604), which was the companion volume to his *Liber de priscorum philosophorum verae medicinae materia* (S. Gervasii, 1603). Together they contain the fullest account of his Paracelsian allegiance, although he had been publishing Paracelsian tracts since the mid-1570s. The Paris Faculty inevitably attacked them and two faculty doctors, the Riolans, father and son, defended the honour of the ancients.

[152] Howard, 'Guy de la Brosse', ch. 5.

[153] e.g. François Ellain's dissertation in the Paris Faculty in 1599, 'An medicamentorum incerta quantitas?': BFMP TMP, ii. no. 297.

[154] One of the last attacks was by the Marseilles physician Gabriel Fontaine [Fontanus], son of Jacques, professor at Aix: see his *De veritate Hippocraticae medicinae firmissisis rationum & experimentorum momentis stabilita, & demonstrata; seu medicina antihermetica, in qua dogmata medica physiologica, pathologica, & therapeutica, contra Paracelsi, & hermeticorum placita clarissime promulgantur: non reiectis penitus chymiicorum inventis, ad Hippocratam artem conferentibus* ... (Lyons, 1657). The last phrase is significant.

The use of Paracelsian remedies was promoted more quickly by the Montpellier than the Paris Faculty, a reflection almost certainly of the Protestant influence in the Midi and the presence in the southern Faculty from the end of the Wars of Religion of students from all over Protestant Europe.[155] As early as 1579 a Montpellier professor, Nicolas Dortoman (d. 1596) published a book extolling the virtues of the mineral waters of nearby Balaruc,[156] and in the first decade of the seventeenth century, if not before, students began to promote the use of manufactured metallic remedies. In 1607 the use of antimony was supported at Montpellier by a student called Jean-Antoine Pellisarius;[157] while the following year Charles Delorme (1584–1678), son of the queen's physician Jean (*c.*1547–1637), claimed in a dissertation that the chemical art was the handmaid of dogmatic medicine, and that among other metallic remedies *aurum potabile* could be used as a *cardiacum* or heart-stimulant to restore the primitive humidity of the body.[158]

Parisian students were more cautious and seem only to have become receptive to Paracelsian therapies once Paracelsian physicians were well entrenched at court. Although there were initial signs of support within the Faculty for Paracelsian drugs in the 1600s, the first student to advocate their use in a dissertation was one Jean de Bourges in 1619. Thereafter, however, an ever-growing number of Paris physicians became enthusiastic promoters of metallic remedies and by 1638 a recipe for antimony was included in the official faculty pharmacopoeia.[159] As a result, it is no surprise to find that the practical medical textbook published by the Montpellier professor Riverius in the middle of the seventeenth century was replete with Paracelsian remedies.[160] By 1680 in fact it was extremely difficult to differentiate between the drugs advocated by establishment faculty

[155] Dulieu, *Médecine à Montpellier*, vol. iii, pt. 2, prosopography, records the names of a large number of Scots especially visiting the faculty in the early 17th cent.

[156] *Libri duo de causis et effectibus thermarum Belilucanarum, parvo intervallo a Monspeliensi urbe distantium* (Lyons, 1579). At this date the spa can only recently have begun to function. It is described at the end of the 16th cent. by Thomas Platter (1574–1628) who visited Balaruc while a student at Montpellier: see Thomas Platter, *Journal of a Younger Brother*, 50–1.

[157] 'An antinomii purgatio fiat cum delectu vel promiscue?', from a series of doctoral theses: BL 1180 b 1(3), p. 34.

[158] From a series of chemical assertions as part of his doct. diss. sustained over three days 1–4 Oct. 1608: see BL 1180 b 2(3), p. 34. Charles Delorme later became famous as a champion of mineral-water therapy: see below, Sect. G.

[159] Details in L. W. B. Brockliss, 'Medical Teaching at the University of Paris, 1600–1720', *Annals of Science*, 35 (1978), 239–45.

[160] e.g. under epilepsy, a distillate invented by Duchesne (Quercetanus): see Lazare Riverius, *Praxis medica cum theoria* (9th edn., Lyons, 1657), 19–22 (1st pub. Paris, 1640). Riverius's textbook is discussed at length below, Sect. G. As we will see, he did not encourage the use of such drugs lightly. The same remedy had been promoted by a Montpellier student in 1639: see Pierre Cognard, 'An epilepsiae syrupus de peto descriptioni Quercetani?', from a series of four theses in BL 1185 f 2(14), pp. 8–10.

physicians and those of their Paracelsian rivals. Significantly, in 1696 when new statutes were promulgated for the Parisian Faculty, the professors of pharmacy were instructed to teach the preparation of both Galenic and chemical concoctions.[161] If any difference did survive between the two groups, then it no longer lay in the choice of remedies but only in the advocated method of their application. It should be noted, too, that in the second half of the seventeenth century, faculty physicians were also quick to introduce to the establishment pharmacopoeia a number of new specifics, such as quinine and ipecacuanha, initially promoted in the France of Louis XIV by individuals the Paris Faculty regarded as out-and-out charlatans.[162] *Cortex peruvianus* or quinine, for instance, was definitely championed in the Paris Faculty by 1684, five years after it made its first appearance in the capital, and its use as a febrifuge was discussed, if not necessarily approved of, as early as 1680.[163]

E. Fernel and his Legacy

It is not difficult to understand why faculty physicians began to view Paracelsian, and other non-traditional, remedies more sympathetically in the seventeenth century. As we have noted, Galenists made no claims as to the infallibility of their art.[164] On the contrary, they stressed its limitations in many cases, especially when patients were suffering from what today might be termed acute diseases and the most painful chronic conditions. Nor did Galenists have completely closed minds, as the very acceptance of Paracelsian remedies, if not Paracelsian philosophy, attests. Moreover, the patient-centred character of medical practice, alluded to in an earlier section, also pushed Galenist physicians towards some kind of accommodation with the rival medical philosophy, not least because their patients were often attracted to Paracelsian healers, especially in the light of the protection the latter received from the royal court. To a certain extent, graduate physicians had little choice but to accept anti-Galenic remedies, if they wanted to maintain their professional authority.[165]

[161] *Statuta facultatis medicinae Parisiensis* (Paris, 1696), 113: see BL 1168 c 8.

[162] For their introd., see below, Ch. 5, Sects. A and C; and Ch. 10, Sect. A.

[163] A thesis entitled 'An quartanae, cortex peruvianus | venae sectio?', was sustained by one Jacques Desprez in 1680: see Hyacinthe-Théodore Baron, *Quaestionum medicarum, quae circa medicinae theoriam et praxim, ante duo saecula, in scholis facultatis medicinae Parisiensis, agitatae sunt et discussae, series chronologica* (Paris, 1752), 59. Unfortunately we have been unable to locate the original to see whether or not Desprez supported the use of quinine. For the history of these two South American drugs, see J. Lévi-Valensi, *La Médecine et les médecins français au XVIIe siècle* (Paris, 1933), 68 ff., and P. Delaveau, *Histoire et renouveau des plantes médicinales* (Paris, 1982), 186 ff.

[164] Above, Sect. C.

[165] Information on patient-practitioner relations in the 16th and 17th cents. is given specifically below in Ch. 5, Sect. A.

However, while there was a solid professional reason for the medical establishment's acceptance of non-Galenic remedies in the course of the seventeenth century, it must be realized that the conversion was made easier by dint of the fact it required little ideological adjustment. The Galenism preached in the faculties of sixteenth- and seventeenth-century France was flexible enough to allow the expansion of the pharmacopoeia with a clear conscience. Contemporary Galenism was a much more plastic and eclectic doctrine than it appeared to be on the surface. Of crucial importance in maintaining this flexible doctrinal openness was the pervasive influence on faculty teaching of the medical philosophy of the great Renaissance Galenist Jean Fernel. The Paris physician Fernel is usually remembered as the scholar who moulded the recently restored classical medical inheritance into a workable synthesis, in the process inventing the Latin words *physiologia* (in the modern sense), *pathologia*, and *therapeutices*.[166] Fernel's synthesis, however, was more than a simple compilation, for he brought to his interpretation of the classical texts an uncommonly sceptical view of the sufficiency of Galenic pathology.

Fernel's distinctive form of Galenism can be most easily approached through his *De abditis rerum causis* ('Concerning the Hidden Causes of Things') which appeared in 1548.[167] In Fernel's view the human body and the diseases to which it was prey could be only imperfectly understood in terms of the balance or imbalance of Galenic qualities. Very often, especially in a virulent disease, there was a hidden or occult factor, which was beyond human comprehension. But if this were the case, then defects in the functioning of the human organism could not always be treated rationally. Occult diseases had to be countered by occult remedies, whose virtues could only be known by trial and error. This fact should not lead man to despair. Fernel began the *De abditis* with a preface expressing his confidence in the achievements of the present age. The ancients were not to be despised but knowledge was cumulative.[168] He closed his work in a similar vein, summoning physicians to arms in search for successful specifics:

Although these lie hidden, wrapped in nature's secrets and in great obscurity, they are not to be ignored from cowardice, but carefully hunted down. They are to be discovered, not from the primary or secondary qualities of touch, not from smell, sound, or

[166] The standard biography is still C. Sherrington, *The Endeavour of Jean Fernel* (Cambridge, 1946). Fernel's *Physiologia* was published under the title *De naturali parte medicinae* (Paris, 1542). In 1554 he published at Paris a complete *Universa Medicina* which contained sections specifically entitled physiology, pathology, and therapeutics. Each section was frequently published separately over the following century. Cicero had used the word *physiologia* in its Greek sense to mean the study of nature.

[167] *Johannis Fernelii Ambiani de abditis rerum causis libri duo* (2nd edn. Paris, 1551) (1st pub. by Chrestien Wechel, Paris).

[168] Ibid. 2–3.

colour, but from their effect and operation alone. This knowledge is confirmed and collated from long observation of their use and from the accounts of the best authors.[169]

Fernel's justification for giving due weight to the occult in his medical philosophy was empirically based, as can be seen from his treatment of the plague. According to orthodox Galenic thought, the plague was best classified as a putrid fever which arose from the corruption of the air by unseasonable weather or by polluting agents such as dead bodies, poisoned wells, and privies. Fernel would have none of this. The plague was certainly not caused by putrefaction. If this were so, then it was inexplicable why the disease might appear in any season or climate, and without evident corruption of the air. The plague, therefore, must be the result of an occult quality. The most that Fernel would grant to orthodox Galenism was that the virulence of the scourge could be affected by atmospheric conditions and that its victims were chosen among the temperamentally inclined. 'This is the reason why a pestilence does not affect and harm all regions and all men in the same way.'[170]

Clearly, then, Fernel gave great freedom to observational autonomy in the diagnosis and cure of disease. However, he was not simply content to distinguish between diseases that had a manifest (i.e. qualitative) cause and those that were occult. He also attempted in the *De abditis rerum causis* to create a cosmology which would make sense of the occult, if not explain its mechanism. He did this through his idiosyncratic doctrine of substantial forms. Such forms were not drawn out of matter, as the Thomist Aristotelians argued, but created in each instance directly by God, who used as his mediating agents celestial instruments. It was impossible, therefore, to relate the essential characteristics or activity of a natural phenomenon to its qualities or temperament, for its substantial form was not elementally derived. Rather, its form was something quintessential, celestial, or divine; it could only be known in terms of its effects. In consequence, if the efficient or external cause of occult diseases and the *modus operandi* of occult drugs would always be beyond our understanding, the ultimate source of their malignancy and restorative virtue was not. This lay in God. Fernel's theory of the occult ultimately stemmed from a theory of God which stressed the untrammelled power of the Creator over his Creation but at the same time the unseemliness of the deity soiling his hands. God the judge could visit mankind with any disease whenever he wished, but he would always choose to act through inferior agents. An occult disease, such as the plague, would thus be one ultimately sent from God but transferred to man (perhaps) through a pathological seed sown in the air by the baneful influence of an adverse planetary

[169] *Johannis Fernelii Ambiani de abditis rerum causis libri duo* (2nd edn. Paris, 1551) (1st pub. by Chrestien Wechel, Paris), 181.

[170] Ibid. 136.

conjunction. To thwart the effects of this visitation, mankind must search for an antidote, an *alexipharmacum*, whose therapeutic properties were the result of a specific gift from God the Father, transmitted once more through a celestial messenger.[171] Fernel's theory combined the late medieval viewpoint of William of Occam (*c.*1285–1349) and the nominalist school that God was unknowable and incalculable with the Neoplatonic belief, revived in the fifteenth-century Italian Renaissance, that God's will was made manifest to man through a hierarchically organized series of intermediaries. He was not religiously unorthodox, but he was not a strict Thomist Aristotelian.[172]

Fernel's influence in the century after his death was immense, and not just in France, as is evident from the fact that his *Physiologia* was reprinted thirty-one times.[173] His authority, significantly, was established on a dual foundation: his immense learning and his favour at court—he had been chief physician to both Henry II and his queen, Catherine de' Medici.[174] Admittedly, his philosophy of medicine was not adopted wholesale: the faculties rejected Fernel's Neoplatonic rhapsodies. Nevertheless, in the faculties of Montpellier and Paris, especially Montpellier, the basic ingredients of Fernel's empirically orientated theory of disease, to the extent that they did not clash with the faculties' Thomist Aristotelian view of substantial forms, were largely accepted. The concept of occult diseases and occult cures became a commonplace, repeated endlessly in the dissertations of students and the publications of faculty professors. If there was disagreement, it was simply over where the line between the manifest and the occult could be drawn. The Paris physician had ended up claiming that virtually every transmissible disease had a directly (albeit mediated) supernatural, rather than natural, cause; not just the plague, but epilepsy, elephantiasis, venereal disease, even dysentery and quartan fevers. Although some Galenists were willing to accept Fernel's classification, most were more cautious and tended to draw the line at the plague and venereal maladies. Even epilepsy, traditionally seen as a supernatural disease, was normally explained naturally. Thus, the Paris physician Jean Riolan the Elder, in his commentary on Fernel's *De abditis rerum causis*, attributed the malady not to an occult poison but to the presence of worms or a putrid ulcer.[175] The plague and the pox, however, were definitely occult. All

[171] Ibid. 127–9.

[172] Fernel's nominalism was also apparent in his empiricism. The revival of interest in Platonic ideas in the Italian Renaissance has been the subject of numerous studies. The growth of hermeticism was part of the same movement, so that the terms Neoplatonic and hermetic are interchangeable: Neoplatonists as much as hermeticists stressed the possibilities of extending human knowledge: see esp. P. Kristeller, *Renaissance Thought and its Sources* (New York, 1979).

[173] It was eventually translated into French in 1655.

[174] Fernel was peculiar for nearly all court physicians were practitioners first and medical philosophers a very poor second.

[175] 'Ad libros Fernelii de abditis rerum causis', in id., *Opera omnia* (Paris, 1610), 149–50. The

that was needed was a medium in which the poisonous seeds could be transferred from person to person. Riverius in the mid-seventeenth century was as adamant as Fernel that experience taught that pestilential fevers were not necessarily the consequence of aerial putrefaction:

> Pestilential diseases often arise when no marked change has occurred to the air as far as its primary qualities are concerned, for the air remains still pure, indeed purer than on other occasions when there is no pestilence. Nor are these diseases preceded by hot and humid weather from which marked putrefaction is accustomed to be born. Thus it is to be surmised that these plagues originate from a certain influx of the heavens.[176]

The widespread acceptance of the Fernelian idea of occult diseases and cures, albeit in a bastardized form, helped to make the assimilation of Paracelsian remedies and other new drugs ideologically painless, for the Fernelian theory of disease legitimized recourse to experience alone in the case of just those diseases where Galenic medicine was apparently least successful. Moreover, it also gave the green light to a wide variety of other remedies and therapeutic practices, whose use had no classical warrant but were an important part of Arabic medicine or had their roots in popular traditions, and therefore in theory (just like Paracelsian cures) ought to have been ruled out of court. A case in point was the use of charms to ward off or cure disease. Late medieval Galenists had made great play of their utility but Renaissance Galenists were often highly sceptical. The mid-sixteenth-century Montpellier physician Joubert seems to have believed that their value was chiefly psychosomatic, cures being effected thereby only when 'the malady was merely holding on by a thread, and the thread snapped by the patient's belief in and great opinion of the practice'.[177] But Fernel's views were different. He certainly poured scorn on what he called magical cures. Ritualistic incantations, hanging parchment inscribed with hieroglyphics around the neck, wearing lucky jewellery: none of these things could naturally protect or cure.[178] Charms, on the other hand, where a natural substance endowed with a specific celestial virtue was placed next to the body, were therapeutically sound, acting much like a magnet in drawing malign qualities.[179] Fer-

Fernelian position was sometimes sustained: see BMFP TMP in fo., ii, no. 387: Gabriel Biard, 'An in epilepsia quid occultum?' (1607).

[176] Riverius, *Praxis medica cum theoria*, 343–5. For two typical Fernelian dissertations on the plague at the Paris faculty in the early 17th cent., see Nicolas Lambert, 'An pestis a caelo?' (1621), and Nicolas Matthieu, 'An astronomis usui medico necessaria?' (1629): BFMP TMP in fo., iii, nos. 658 and 740.

[177] *Erreurs*, 'Premier livre', 76.

[178] Fernel believed that the use of such magical cures was in order, when the cause of the disease lay in demonic possession. In such cases the patients only displayed the symptoms of the disease, and a cure could not be effected naturally: see his *De abditis rerum causis*, 157–62.

[179] Ibid. 167–9.

nel's followers, then, for all their deference to classical antiquity, were enthusiastic promoters of medical amulets. Particular favourites were rings of elk's nail and charms of peony root for curing epilepsy.[180]

Some Fernelians even went further and supported the Paracelsian belief that wounds could be healed by anointing the cause of the lesion, not the lesion itself. In the seventeenth century this form of therapy was vigorously advocated by a number of physicians outside France, such as the Leuven graduate Jean Baptiste Van Helmont (1579–1644) and the English royalist empiric Sir Kenelm Digby (1603–65),[181] and just as vigorously repudiated by Aristotelo-Galenists who could not conceive how the virtues of a salve could operate without bodily contact. The fact, then, that the Scot Sir Thomas Burnet (1632–1715) could sustain this position in a dissertation at Montpellier in 1659 demonstrates perfectly how plastic a philosophy French faculty Galenism actually was.[182]

It must be stressed that Fernel's followers were not Paracelsian fellow-travellers. Even if they ended by accepting wholeheartedly a wide range of Paracelsian therapies, they never accepted the chemists' underlying philosophy. Indeed, licensed practitioners of physic were always careful to distance themselves from Paracelsian ideas and were quick to censure any of their number who sailed too close to the wind, as the fate of the Paris physician Pierre Le Paulmier (1568–*c.*1610) in 1610 reveals.[183] Le Paulmier was definitely steeped in the learning of Fernel. According to another Paris physician, Gui Patin (1601–72), he had inherited the great man's papers through his uncle, who had been Fernel's servant.[184] Le Paulmier, however, took his enthusiasm too far and developed a medical philosophy which had distinctive hermetic elements. Le Paulmier first fell foul of the Faculty in 1597 when he was threatened with expulsion 'because he had dictated to [apprentice] apothecaries propositions alien to the doctrine of Hippocrates and Galen and the dignity of this school'.[185] What exactly he had taught on that occasion is unclear but presumably his views bore some relation to those he expressed in a work published in 1609 as part of the

[180] e.g. among Paris dissertations: Jean Lamperière, 'Estne in periaptis vis medica?' (1598); Guillaume Duval (1579–1646), 'An carbunculo sapphira?' (1611); Michel Duport, 'An curandis morbis amuleta?' (1643): BFMP TMP in fo., ii, no. 276; iii, no. 437; iv, no. 916.

[181] Van Helmont's *De magnetica vulnerum curatione* appeared in Paris in 1621; Digby, exiled in France during the 1650s, published his *Discours touchant la guérison des playes par la poudre de sympathie* in Paris in 1658; he apparently lectured on its virtues at Montpellier the same year. For Van Helmont's medical philosophy, see below, Sect. F.

[182] Burnet referred to wounds caused by objects such as cupboards and chests, rather than weapons as was customary: see BL 1185 f 3, series of diss. 26–8 Aug. 1659, p. 30; the attribution to Burnet is putative.

[183] The year of his death is highly uncertain.

[184] *Lettres*, ed. J. H. Reveillé-Parise (3 vols.; Paris, 1846), i. 280: Patin to the Troyes physician, Belin, 28 Mar. 1643.

[185] See BFMP MS 9, fos. 37–8, minute 5 Dec. 1597.

Faculty attack on the court Paracelsians and ambiguously entitled *Lapis philosophicus dogmaticorum* ('The Philosophical Stone of the Dogmatics').

This work targeted in particular the German physician Andreas Libavius (1540–1616), who had penned a defence of Henry IV's physician Duchesne.[186] In most respects Le Paulmier's work was perfectly orthodox. It supported the distinction between the sublunary and superlunary worlds, rejected the Paracelsian elements and curing by similars, and accused Paracelsians of being empirics (i.e. dependent on experience alone).[187] It was controversial for two reasons. In the first place, Le Paulmier enthusiastically recommended the use of metallic poisons at a time when the Faculty was still suspicious of their value. He even added a series of case studies to the text, especially the account of a woman with elephantiasis, whom he had cured with *aurum potabile*.[188] Secondly, and more significantly, the work contained several provocative ideological statements. Le Paulmier maintained that strong medicaments were needed for strong diseases.[189] He also asserted that the world was growing older and decaying. Consequently, disease was more rife and traditional cures no longer effective. 'Nature has created diseases superior to our skill and our medicaments. We are in consequence forced to develop an art different from the ancients.'[190] Above all, Le Paulmier declared that all medicaments worked through an invisible quintessence, a peculiar heat emitted by the heavenly bodies and transferred to the sublunary world through the mediation of the universal *spiritus mundi*. Chemical distillation by fire allowed the physician to get closer to this quintessence and thereby produce more efficacious drugs. This quintessence, contained in all things, was a universal panacea, 'by which our exhausted, tottering and unhealthy nature is helped, warmed, and sustained'.[191]

Not surprisingly the Faculty disapproved of Le Paulmier's audacity and he was duly expelled.[192] It was one thing to claim that the cause and cure of some

[186] *Defensio alchemiae et refutatio objectionum ex censura scholae Parisiensis*, in id., *Alchymia recognita, emendata, et aucta, tum dogmatibus et experimentiis nonnullis, tum commentario medico-physico-chemico* (Frankfurt, 1606), pt ii, pp. 1–70. This book, condemned by the Faculty, was answered by Jean Riolan the Elder in the same year: see n. 145, above.

[187] Pierre Le Paulmier [Palmerius], *Lapis philosophicus dogmaticorum, quo paracelsista Libavius restituitur, scholae medicae Parisiensis iudicium de chymicis declaratur, censura in adulteria et fraudes Parachymicorum deffenditur, asserto verae alchemiae honore* (Paris, 1609), esp. chs. 7–8 on elements. According to Le Paulmier (p. 1) initially Duchesne had practised medicine dogmatically at court, merely using chemical remedies.

[188] Ibid., ch. 33, no pagination. Ch. 24 discusses *aurum potabile*. Le Paulmier attacked Libavius's preparation of *metalla* claiming that impurities could only be removed by fire (e.g. pp. 127–9).

[189] Ibid., ch. 19. [190] Ibid., pp. 118–19.

[191] Ibid., pp. 62–7, and ch. 13 (esp. pp. 62–3). Le Paulmier asserted that this was Galen's doctrine, if in his youth he had attributed the healing power of medicaments to their temperament.

[192] See Brockliss, 'Medical Teaching', 242. He was only rusticated for two years because he recanted.

diseases was occult; it was another to claim that this was universally true and offer an explanation of the phenomenon. There was a definite line which Fernelians crossed at their peril.

There were, moreover, some faculty physicians who identified all Fernelians as Paracelsians in all but name. In the first half of the seventeenth century an important coterie of French Galenists, predominantly to be found in the Paris Faculty, reacted strongly against the Fernelian theory of the occult and attempted to assert a completely rationalist doctrine of disease. The group was not hostile to Fernel. Indeed, if their most colourful representative Gui Patin is any guide, they held him in as much veneration as other faculty physicians did. Patin believed that Fernel was the prince of Renaissance Galenists, and he regularly used to take his sons to visit the great man's tomb in the Paris church of Saint-Jacques de la Boucherie, 'exhorting them to become like him'.[193] Rather, the group believed that Fernel's ideas were not to be accepted as gospel. Fernel, said Patin, was only a man:

> I honour him as the most learned and the most elegant of the moderns [i.e. of Renaissance physicians], but just as he has not written everything, so he has not told the truth in everything he has written, and if the good man, who died too soon to our great loss, had lived longer, he would have changed some things in his works.[194]

The anti-Fernelians were particularly incensed by their colleagues' advocacy of the Paracelsians' metallic drugs which, they insisted, were killer poisons.[195] It can be no coincidence that the group first became visible at the very moment that faculty physicians began to favour such drugs. Presumably, Galenists who found the use of antimony and other metals unacceptable quickly concluded that Fernelianism was the thin end of the Paracelsian wedge. If a less flexible Galenic rationalism were to become the dominant faculty philosophy, then the use of metallic poisons could not be legitimated. Either the Paracelsian fellow-travellers would have to repudiate these drugs, or they would have to come out into the open (as Le Paulmier had involuntarily done) and admit their unorthodox philosophical allegiance.

The anti-Fernelians have left the best account of their beliefs in the dissertations sustained in the Paris Faculty. From the turn of the seventeenth century a number of students challenged the existence of occult diseases and remedies, even in the case of the plague. The power of the heavens to cause disease was certainly recognized but that power was declared to be a manifest one, resulting from the light and movement of the heavenly orbs, not from any occult influx.

[193] *Lettres*, iii. 199: letter to the Lyons physician, André Falconet (1611–91), 27 Apr. 1660.
[194] Ibid. i. 10: letter to Belin, 28 Oct. 1631.
[195] Patin's letters contain endless references to the murderous deeds of his Faculty colleagues whom he accused of killing their patients with antimony wine.

Sometimes this power was easy to comprehend. The sun evidently had a role in the creation of pestilential fevers through its undoubted power to cause putrefaction. Sometimes the malignancy was concealed. None the less, it was a general principle that 'everything can have a hidden cause, yet not a divine one'.[196] If, then, all diseases had a manifest cause, their qualitative nature could also be known and the appropriate manifest remedy selected. There was no need to have recourse to dangerous, occult specifics.

Although the anti-Fernelians' main target was Paracelsian metallic remedies, they also declared illegitimate and dangerous a host of other traditional therapies whose use could not be rationally explained. In 1611 the Paris student Guillaume Desdames attacked a long list of popular occult cures for epilepsy, which included semen collected under a waning moon, oak flesh, and potions and powders concocted from a human skull, human bones, and cuckoo's ashes.[197] Other Paris Faculty students could be just as caustic about time-honoured cures or prophylactics for the plague. In 1617 René Moreau (1584–1656) ruled out of court not just the use of gold and rubies, but exotic and whimsical remedies such as *lapis bezoardicus*, *bolus armenicus*, and the palpitating heart of the turtle.[198] Moreau did not even accept the use of the famous antidotes theriac and mithridate, two extremely complex medicaments whose ability to counter poisons was supposed to stem from an occult quality created in their concoction.[199]

The anti-Fernelians, then, were not just engaged in undermining the legitimacy of Paracelsian drugs, but in cleansing the faculty pharmacopoeia of all remedies that they viewed as irrational and empirical. As far as Patin was concerned the aim was to establish a much simpler, primarily herb-based *antidotaire*, and deliver Parisians from the tyranny of greedy apothecaries, whom he described as 'cusiniers arabesques' ('Arab cooks').[200] In the eyes of the anti-Fernelians, the good doctor was not just a learned physician but one who used

[196] e.g. BFMP TMP in fo., iii. no. 281, Bonaventura Hachette, 'An in epilepsia *theion ti* [Greek]?'. A good ex. of a 'manifest' explanation of the plague is to be found in La Framboisière, *Gouvernement*, 361–5. La Framboisière believed that the plague was a divine chastisement but he attributed its cause to contaminated air; it was not simply, as Fernel maintained, an air-borne infection.

[197] BFMP TMP in fo., iii, no. 436, 'An epilepsiae cranium humanum?'.

[198] Morellus [Moreau], 'An pesti remedia adoxa [Greek]?', in BFMP TMP in fo., iii, no. 574. Bezoar stone came from the Orient and was a stony hardened mass formed in the stomach of certain ruminants; Armenian bolus was a complex antidote like theriac mentioned below.

[199] The apothecaries' concoction of theriac was a community event and an annual ritual. Moreau was extreme in this respect. Usually anti-Fernelians did accept theriac: e.g. Philbert Morisset, 'An pestilenti febri theriaca?', BFMP TMP in fo, iv. no. 676. For its composition, see below, Sect. G.

[200] Patin, *Lettres*, *passim*, esp. i. 453: letter to the Lyons physician Charles Spon (1609–84), 18 Jan. 1649. In seeing the apothecaries as the guardians of Arabic medicine, Patin clearly had much in common with Sébastien Colin half a century earlier: see above, Sect. B.

only drugs whose mechanism he could understand. Patin and his friends genuinely believed that Paracelsian remedies were lethal. However, in developing a philosophical explanation of their hostility to the use of such remedies, they ended by arguing implicitly that even if non-Galenic drugs were experientially successful, their use could still not be morally supported. This was because of the logical weakness of all *post hoc propter hoc* assertions. To the anti-Fernelians, a doctor could only be sure that a cure had been effected by a particular remedy (rather than by chance, divine intervention, the healing powers of nature, and so on) when he could offer an explanation in Galenic terms of its action.

Anti-Fernelians, like Gui Patin, were medical puritans who claimed to be placing their intellectual integrity above the lures of public reputation and monetary gain.[201] They fought a courageous but losing battle. The Paris Faculty was too flexible—and too much the prisoner of patients' therapeutic predilections and preconceptions—to accept these self-denying ordinances, and by the mid-seventeenth century the anti-Fernelian attempt to hold back the tide of eclecticism had all but collapsed. Significantly, the movement never engendered much support at court.[202] The royal family and the king's chief ministers nearly always drew their licensed medical practioners from the Fernelian camp.[203] Indeed, to Patin's disgust, the court from the 1620s was an avid patron of metallic remedies. In particular, Louis XIII, his queen, Anne of Austria, and Richelieu were all confirmed devotees of the new Paracelsian-inspired craze of 'taking the waters', a therapy, we have seen, that Montpellier physicians were already promoting in the last decades of the sixteenth century.[204] The final nail was hammered in the

[201] Throughout his letters, Patin describes antinomy doctors as venal and rich.

[202] Richelieu may have found the anti-Fernelians irritating for political reasons. Another aspect of their 'rationalist' philosophy was a suspicion of the Fernelian belief in satanic possession and other demonic diseases. In the famous 'Devils of Loudun' affair of the 1630s Richelieu almost certainly manipulated the Church's belief in possession for his own political ends: see L. W. B. Brockliss, 'Seeing and Believing: Contrasting Attitudes towards Observational Autonomy among French Galenists in the First Half of the Seventeenth Century', in W. F. Bynum and R. S. Porter (eds.), *Medicine and the Five Senses* (Cambridge, 1992), 80–2. This article investigates many of the themes explored in this section.

[203] Admittedly, according to Patin, the chief physicians to Louis XIII and Louis XIV in the years 1628–46, Charles Bouvard (1572–1658) and Jacques Cousinot (*c.*1585/90–1646), were both stolid Galenic rationalists: see *Lettres*, *passim*, esp. i. 453: letter to the Lyons physician Charles Spon (1609–84), 18 June 1649, a list of those on the side of the angels.

[204] The king and queen were regular visitors to Forges on the Picardy–Normandy border in an attempt to cure the queen's sterility. Louis's grandmother, the Protestant Jeanne de Navarre and her mother, Marguérite d'Angoulême had already taken an interest in mineral-water therapy in the 16th cent.: see N. L. Roelker, *Queen of Navarre, Jeanne d'Albret 1528–1572* (Cambridge, Mass., 1968), 47, 83, 159, 195. Fittingly, one of the leading spa enthusiasts at court in the reign of Louis XIII was the Montpellier graduate encountered above (Sect. D), Charles Delorme, physician to Louis XIII's disgraced brother, the duc d'Orléans: see L. W. B. Brockliss, 'The Development of the Spa in Seventeenth-Century France', in

anti-Fernelian coffin in 1658 when no less a person than the king, on campaign near Calais, was purportedly cured of a fever by taking antimony wine on the advice of a posse of royal physicians.[205] Eight years later, despite anti-Fernelian protests, even the Paris Parlement caved in and revoked its earlier *arrêt* (of 1566) outlawing antimony's use. By that date perhaps only ten of the hundred Paris physicians continued to support the ban.[206] As Louis XIV began his personal rule it was a plastic not puritanical Galenism which firmly ruled the faculty roost.

F. The Faculties and the Scientific Revolution

In the course of the first half of the seventeenth century the faculties had been able to draw the sting of the Paracelsian challenge without compromising the fundamentals of Galenic medical science. From the second quarter of the century, however, Paracelsianism was not the only threat to Galenic orthodoxy. On the one hand, the anatomical enthusiasm of the sixteenth century finally gave birth to a radical critique of Galenic physiology with Harvey's discovery of the circulation of the blood, announced in 1628. If true, and the anatomical evidence in its favour steadily accumulated over the following decades, Harvey's discovery made a nonsense of the Galenic belief in the separate functions of the venal and arterial system: not only was new blood not continually created in the liver, but venal blood flowed back to the heart, not towards the body's extremities to feed the parts, as the traditional theory demanded. On the other hand, Galen's dominance was assailed by two further alternative medical philosophies: iatrochemistry and iatromechanism. The first was an attempt to explain all physiological and pathological change in terms of chemical reactions, rather than substantial forms. Its founding father was the Leuven physician Van Helmont, whose mature medical philosophy was first published posthumously in his *Ortus medicinae* of 1648. The second was a completely novel medical doctrine that reduced the body to a simple machine and explained health and sickness in terms of particulate matter in motion. It was the medical counterpart of the contemporary mechanical natural philosophy, and its ur-text was appropriately the *De l'homme* of the century's leading mechanist René Descartes (1596–1650), again printed posthumously in 1662.[207]

R. S. Porter (ed.), *The Medical History of Waters and Spas*, 28–9. For mineral-water therapy, see below, Sect. G.

[205] Details in Antoine Vallot, Antoine d'Aquin, and Gui-Crescent Fagon, *Journal de la santé du roi Louis XIV (de l'année 1647 à l'année 1711)*, ed. A. Le Roi (Paris, 1862), esp. 58–60.

[206] See F. Millepierres, *La Vie quotidienne des médecins au temps de Molière* (Paris, 1964), 99–109.

[207] For an introd. to these two medical schools, see L. S. King, *The Philosophy of Medicine: The Early Eighteenth Century* (London, 1978), chs. 4 and 5.

Taken together, these new developments in medical science represented the medical component of the seventeenth-century Scientific Revolution, a movement that both built on and challenged virtually every aspect of traditional natural philosophy, by placing a novel emphasis on observational autonomy and the mathematicization of nature, and promoting particulate/atomic and mechanical explanations of natural phenomena.[208] The rapidity with which the professors felt they had to respond positively to these new challenges to Galenic orthodoxy depended on the speed with which they attracted support in the wider educated milieu. This in turn reflected the extent to which the new ideas were able to escape more quickly than Paracelsianism the taint of heresy. Where they were deemed worthy of serious consideration, the history of their assimilation followed a predictable pattern. As with the case of the Paracelsian challenge, the faculties' initial response to these new discoveries and theories was hostile. Over time, though, this hostility mellowed and a successful attempt was made to accommodate aspects of the new medical science with Galenic orthodoxy. As a result, until the 1680s Galenism remained the dominant medical philosophy taught in the faculties. As we will see, the novel medical ideas of the seventeenth century were integrated with the traditional course at some expense to Galenic fundamentals, but not to their total detriment. By the time Louis XIV's great minister Jean-Baptiste Colbert died in 1683, faculty Galenism had become an extremely plastic philosophical animal indeed, but it was still alive.

The least problematic challenge to traditional Galenism was presented by the Harveian discovery of the blood's circulation,[209] although its acceptance was a long-drawn-out process which lasted forty years. Initially, the publication of *De motu cordis* was completely ignored, and no mention (positive or negative) appears of the circulation of the blood in student dissertations before 1640. Indeed, at no time in the first decades of the seventeenth century did faculty students even debate the pulmonary circulation. The reason for the initial silence can be explained on evidential and theoretical grounds. Although Harvey believed that he had proved conclusively that the blood circulated, he had not been able to discover the capillaries: his assertion remained a highly plausible deduction based on a variety of ingenious vivisectional experiments, which purportedly demonstrated that blood in the veins flowed in the opposite direction

[208] A solid introduction to the Scientific Revolution remains A. R. Hall, *From Galileo to Newton 1630–1720* (London, 1963). The new science of the 17th cent. rejected scholastic Aristotelianism but still drew heavily on the alternative classical traditions of Epicurean atomism and Archimidean statics. For an overview, see E. J. Dijksterhuis, *The Mechanization of the World Picture: Pythagoras to Newton* (Oxford, 1986).

[209] On Harvey's discovery, see esp. Whitteridge, *William Harvey*, 81–146; and W. Pagel, *William Harvey's Biological Ideas* (Basle, 1967), 169–229.

to that traditionally assumed. Arguably, the discovery remained insufficiently substantiated to merit jettisoning a fundamental of Galenic physiology, all the more since in France Harvey's theory became associated with religious unorthodoxy because of the support it immediately received from the notorious English hermetic Robert Fludd (1574–1637). As Harvey was a convinced Aristotelian, whose enthusiasm for Aristotle's heart-centred physiology may well have released him from the shackles of the Galenic obsession with the liver, such an association was grossly unfair. The damage, however, was done, and was only compounded when Harvey was equally championed by Descartes in the latter's first tentative public exploration of the mechanical philosophy in his *Discourse on Method* of 1637.[210]

The first student thesis known to have discussed the Harveian theory was sustained by one Simon Boullot at Paris in 1642. It was totally dismissive and held completely to the traditional Galenic view, even to the extent of continuing to maintain that part of the blood in the right ventricle crossed to the left via the septum, where it was turned 'into a pure spirit and juice, which keeps warm [*fovet*] the native heat of all the members'. Circular movement, Boullot insisted, was simple and perfect, and was thus only suited to simple and perfect beings. He accepted that blood in the veins fed the arteries by 'hidden and blind anastomoses' (i.e. unobservable interconnections), but this did not mean that the blood circulated.[211] Within three years, however, the Paris Faculty's position had changed somewhat. Although students for the next twenty years continued to reject Harveian physiology, they did, on the other hand, accept that the traditional Galenic theory required alteration and that the blood did actually circulate, after a fashion. The architect of the less critical position was Jean Riolan the Younger, who returned to the bosom of the Faculty in the early 1640s, after spending the 1630s outside France as physician to the exiled queen-mother Marie de' Medici.[212] Riolan had met Harvey in England (during his royal charge's sojourn at the court of her son-in-law), and been impressed by his theory. On his return to France (or perhaps before) he had formulated an alternative theory of circulation, which, he believed, equally fitted the anatomical facts and was much closer to Galen. This theory was first discussed publicly in the Paris Faculty in 1645 when Riolan had a student, Jean Maurin, sustain a disser-

[210] *Discourse on Method and the Meditations*, trans. and introd. F. E. Sutcliffe (Harmondsworth, 1968), 65–72 (Discourse 5). Descartes's gave a mechanical explanation of how the heart worked, in contrast to Harvey's facultative one. See below, n. 225.

[211] 'An motus sanguis circularis?', BFMP TMP in fo., vi, no. 901. This thesis does not name Harvey personally. It should be noted that in fact some blood does penetrate from the right to the left ventricle through the septum.

[212] While serving the queen-mother, he also acted as Richelieu's agent: see the letter he wrote to the Cardinal on Marie's death in Armand-Jean du Plessis, cardinal-duc de Richelieu, *Lettres, instructions diplomatiques et papiers d'état*, ed. D. L. M. Avenel (8 vols.; Paris, 1835–76), vii. 911–14.

tation with the provocative title 'Whether, because of the circulatory motion of the blood in the heart, Galen's method of healing is to be changed'.

Like Boullot, Maurin continued to believe that part of the venal blood (the thinner part) was transferred from the left to the right side of the heart through the septum, but he parted company with his fellow student in now accepting that blood genuinely circulated from the arterial to the venal network by anastomosis. However, he was no Harveian. He insisted that the blood travelled only slowly round the body, probably only circulating once or twice a day (Harvey had argued for an hourly circulation), and he maintained that only the blood in the aorta and vena cava continually circulated. Most of the blood which entered the minor arteries, he asserted, continued to be absorbed in feeding and heating the parts. In other words, sanguification remained a continuous process based on the liver (in order to keep the vena cava full), and there was no genuine transfer of circulating blood through minor vessels connecting the minor arteries and veins.[213]

Riolan committed his views to print in a new edition of his *Anthropographia* in 1648, where his new physiology was discussed in detail and which both Harvey and traditional Galenists denounced.[214] Given Riolan's reputation in France it might have been assumed that his theory of circulation was quickly accepted as faculty orthodoxy throughout the country. However, there is no evidence that it was ever supported anywhere outside Paris. One of the reasons for this was that the theory was, to say the least, factually implausible given that no one had ever seen the large blood vessels that were needed to connect the aorta and the vena cava. Moreover, elements of the theory were illogical. Riolan argued that on occasion no blood at all crossed from the arterial to the venal network with the result that the minor veins could be potentially empty. To prevent this happening, he maintained, blood from the vena cava was attracted into the empty vessels, with the result that venal blood could flow both away as well as (normally) towards the heart![215] In addition, a new anatomical discovery, announced in 1651, completely undermined the traditionalist thrust of the theory by casting doubt on the role of the liver in sanguification. In that year the former

[213] Jean Maurin, 'An propter motum sanguinis in corde circulatorium, mutanda Galeni methodus medendi?': BFMP TMP in fo., vi, no. 939.

[214] Jean Riolan the Younger, *Encheiridium anatomicum et pathologicum* (Paris, 1648), esp. the discourses on the heart and the circulation of the blood. For Harvey's reply, see Harvey, 'The First Anatomical Essay', and 'A Second Essay to Jean Riolan', in id., *The Circulation of the Blood*, 121–82. Riolan also objected to Harvey's experimental technique in that he thought vivisection cruel and useless: animal and human physiology were not the same.

[215] Riolan also argued that blood in the portal vein did not usually circulate at all, but flowed backwards and forwards, and served as a reservoir to top up the vena cava: see Jean Riolan the Younger, *Manuel anatomique et pathologique, ou abrégé de toute l'anatomie et des usages que l'on en peut tirer pour la guérison des maladies* (Paris, 1661), 341–50, 712–15. French trans. of his *Encheiridium* and other treatises.

Montpellier medical student Jean Pecquet (1622–74), a committed Harveian, published a work demonstrating that chyle was transferred from the intestine to the vena cava without passing through the liver at all. If Pecquet was right, then the Galenic belief to which Riolan still subscribed, that the liver played the crucial role in sanguification, was totally shattered.[216]

Not surprisingly Riolan, now a very old man, fought his corner and tried to salvage the essentials of his theory. He accepted the existence of Pecquet's canal but argued that the majority of the chyle still travelled to the liver and then to the vena cava. The passage discovered by Pecquet was merely a safety valve to prevent the overburdening of the mesenteric vessels and to ensure that some chyle reached the bloodstream (albeit unpurified) if something was wrong with the liver.[217] Riolan gained no new disciples, however, and by his death in 1658 there were the first signs that professors in other faculties were coming to accept that the Harveian theory (corrected by Pecquet) fitted the anatomical facts.

Inevitably, the Montpellier Faculty led the way. Even in the early 1650s Harvey had his supporters in the Midi. The fact that the Englishman was a Protestant, that Pecquet was a Montpellier alumnus (although he never took his degree there), and that Paris and Montpellier in the mid-seventeenth century were caught up in a quarrel over the rights of Montpellier graduates in the capital can only have encouraged the transfer of allegiance.[218] A decade later even Montpellier surgeons were supporting the circulation of the blood.[219] Other faculties seem quickly to have followed suit, for students sustained Harvey's theory at Reims in 1663 and Caen in 1669, while a Harveian, Pierre Hunauld (1634–89), became a doctor-regent at Angers in 1664.[220] The Paris Faculty itself

[216] Pecquet discovered the thoracic duct in 1647. The lacteal vessels had been discovered by the Italian Gaspare Aselli (1581–1625) in 1622 but it had been previously assumed that they connected with the liver.

[217] 'Discours contre la nouvelle doctrine des veines lactées, tiré de la response faite par le sieur Riolan': Riolan the Younger, *Manuel*, 688–705. Ironically Riolan was more accommodating than Harvey, who refused to accept that Pecquet's canal carried chyle and remained convinced that chyle entered the bloodstream via the liver: see William Harvey, 'The Third Letter in Reply to Robert Morison, MD of Paris', in *Circulation of the Blood*, 193–200. Morison (1620–83) was an Aberdonian and royalist exile.

[218] In fact, Montpellier's Harveian sympathies were first evinced as part of that quarrel: see [Simeon Courtaud (1583–1664), Faculty dean], *Seconde apologie de l'université en médecine de Montpellier, répondant aux Curieuses Recherches* (Paris, 1653), 4–5, where Riolan is attacked for his failure to discover the circulation of the blood. For the quarrel, see below, Ch. 5, Sect. E. An additional factor encouraging acceptance was probably the presence of English and Scottish students at Montpellier in the mid-cent. Unfortunately we know little about their views on sanguification. Thus the Scot Sir Thomas Burnet, the putative author of a set of theses from 1659, was doubtless a Harveian, but his comments on the circulation of the blood are left as a series of undeveloped statements: see BL 1185 f 3, no. 3, pp. 26–33, under *paradoxica anatomica*.

[219] As early as 1664 a Montpellier surgeon, Jean Marlet, published a positive account of Harvey and Pecquet's discoveries: see Dulieu, *Chirurgie*, 180–1.

[220] O. Gueilliot, 'Les Thèses de l'ancienne faculté de médecine de Reims', *Travaux de*

eventually succumbed. In 1665, the very year that Marcello Malpighi (1628–94) demonstrated the existence of the capillaries, a Paris student called Paul Mattot clearly described the circulation of the blood in a thesis which discussed the movement of the heart.[221] By the end of the decade the revolution was complete. The last thesis from the Paris record in which Harvey was rejected was one sustained in 1670 by Jean Cordelle, who remained adamant that there was no visible evidence for the theory ('for who sees the operations of nature?') and that it lacked sound experimental or rational proof.[222] Three years later the new theory received royal warranty when Louis XIV ordered the surgeon Pierre Dionis to teach the circulation of the blood in his anatomical and surgical course at the Jardin du Roi.[223]

The acceptance of Harvey considerably undermined the Galenic character of the faculty curriculum. After 1670 a course in physiology was organized around two rather than three principles, the heart and the brain, and the liver lost its traditional importance. The heart was no longer merely the organ that maintained native heat but was equally the seat of life.[224] All the same, the faculties' conversion to Harvey's ideas had surprisingly little impact on the concepts that underpinned medical theory. As a scholastic Aristotelian, Harvey maintained a belief in substantial forms and faculties, so the acceptance of the circulation of the blood did not dethrone the fundamental explanatory concepts of Galenic physiology.[225] Moreover, promotion of the Harveian theory seems to have had no immediate impact on the way faculty professors discussed the nature and cure of disease, even if opponents, such as Cordelle, thought that traditional therapeutics based on attenuating the noxious humour would thereby become superfluous. Letting blood, in his opinion, would only reduce its quantity and cause it to circulate more quickly, thus increasing its temperature.[226] The acceptance of Harvey's discovery, then, did not sound the death-knell of faculty

l'Académie de Reims, 81 (1870), 228 (theses of one Lallemand); AD Calvados 1D 987, no. 2 (single fo.), Étienne Bouiu de Tertre, 'An cor est sola pars princeps?'; Lebrun, *Hommes et la mort*, 200.

[221] BFMP TMP in fo., viii, no. 1160: 'An motus cordis a sanguinis fermentatione?'. Until Malpighi's discovery there was no anatomical evidence for the circulation of the blood; the means of transference remained guesswork.

[222] BFMP TMP in fo., viii, no. 1235: 'An sanguis per omnes corporis venas et arterias iugiter circumfertur?'. Cordelle could not see how the blood could feed the parts if it was not consumed.

[223] Y. Laissus, 'Le Jardin du Roi', in R. Taton (ed.), *L'Enseignement et diffusion des sciences au XVIIIe siècle* (Paris, 1963), 313.

[224] Riolan had argued that even if the bodily parts were now fed by blood that had passed through the heart, the heart had no nutritive faculty, and the circulation of the blood was not essential for life: see his *Manuel*, 712–15.

[225] On Harvey's Aristotelianism, see Pagel, *Harvey's Biological Ideas*, 23–47. Harvey e.g. believed that the blood was forced from the ventricles of the heart by the heart's pulsative *faculty*.

[226] Harvey claimed that his ideas did not destroy but advanced traditional medicine: see his comments *inter alia* in *Circulation of the Blood*, ch. 16.

Galenism. In retrospect, the faculty's acceptance of Harvey only seems the thin end of the anti-Galenic wedge in that it was followed within a decade by the faculty's absorption of a genuinely alternative medical philosophy: iatrochemistry.

Iatrochemistry, as we saw, was the brainchild of Van Helmont, but it was principally developed in mid-seventeenth-century England and Holland by the Oxford physician Thomas Willis (1621–75), and another Sylvius, Franciscus de la Boë (1614–72), professor of medicine at Leiden from 1658.[227] Although Van Helmont himself had close affinities with Paracelsianism, it would be wrong to see the new philosophy as simply the offspring of sixteenth-century medical hermeticism. The Paracelsians (if not Paracelsus himself) were alchemists interested in using chemical techniques to purify drugs and discover the elixir of life. They did not use chemistry to build a fully fledged medical theory. This was to be the contribution to medical philosophy of the mid-seventeenth-century iatrochemists, who were convinced that all physiological and pathological processes could be explained in terms of acid–alkali fermentation, effervescence, or putrefaction. Digestion for instance was the result of an acid–alkali ferment, whereby food was broken down by secreted acids. The iatrochemists, moreover, eschewed the hermetic interests of their Paracelsian forebears. They placed great emphasis on expressing their ideas clearly and attempted to provide *in vitro* experimental evidence for their theories. They were thus much closer to the new type of 'sceptical chemist' lauded by Robert Boyle (1627–91)—a chemist who carefully, rigorously, and without preconceptions analysed natural phenomena in search of its constituent parts—than the dogmatic adept of the past.[228]

Iatrochemistry, however, was just as great a challenge to establishment Galenism as Paracelsianism, for it offered a radically alternative way of explaining the body in health and disease. Whereas Galenism was a doctrine based on the immediate qualities that the bodily parts and humours presented to the senses (hot and cold, sour and sweet, etc.) iatrochemistry was based on their chemical structure. The data for physiological and pathological explanation were drawn from subtle analysis rather than commonsense observation. Moreover, iatrochemists were not so theologically suspect as Paracelsians in the eyes

[227] On the development of iatrochemistry, see J. R. Partington, *A History of Chemistry*, (London, 1961), ii. 271–320; Debus, *French Paracelsians*, ch. 5; W. Pagel, *Jean-Baptiste Van Helmont: Reformer of Science and Medicine* (Cambridge, 1982); E. O. Baumann, *François de la Boë Sylvius (1614–1672)* (Leiden, 1949).

[228] Boyle's ideas were most famously expressed in his *Sceptical Chymist* (London, 1964 edn.) (1st pub. 1661): it attacked both the Paracelsians and the Aristotelians for their naïvety in assuming that they had discovered the elements of matter. Boyle, however, was not as unsympathetic to alchemy as has often been thought: see esp. L. M. Principe, 'Boyle's Alchemical Pursuits', and W. R. Newman, 'Boyle's Debt to Corpuscular Alchemy', both in M. Hunter (ed.), *Robert Boyle Reconsidered* (Cambridge, 1994).

of the Catholic Church. The promotion of iatrochemical ideas in France and other Catholic countries in the second half of the seventeenth century was not prevented by the establishment.[229] As a result faculty Galenists could not ignore iatrochemistry in the way they had ignored most aspects of Paracelsianism (apart from the remedies its supporters had championed).

Not surprisingly, then, iatrochemical ideas were being discussed in faculty theses by the mid-1660s with little time-lag from their first appearance in print.[230] For a long time the response, as with the reaction to Harvey, was highly critical, especially at Paris. In 1665, the same year that a Paris bachelor first unequivocally supported the circulation of the blood, another student, Charles Le Long, just as unequivocally attacked the iatrochemical theory of chylification (the process of creating chyle from food and drink). According to Le Long there was no anatomical evidence that secreted acids had a role in breaking down food, so there was no reason to jettison the traditional Galenic idea that chyle was created by the stomach's heat. He accepted the existence of stomach acids but claimed that their role was entirely different from what the chemists imagined. 'To the extent that acids propel foods into the bottom of the stomach, they strengthen its craving for them but do not promote coction [i.e. their metamorphosis into chyle].'[231] Le Long's thesis established the Paris line for the next two decades. Even in 1683 the bachelor Nicolas Bailly continued to argue that iatrochemistry had nothing to offer the physician. Not only were the effects of the chemists' salts different from what they claimed, but the concoctions they prepared in their laboratories had no connection with the contents of blood and noxious bodily humours. 'Thus it was false to attribute to these salts supreme power over all natural bodies, and false, too, to arrogate to them the command of diseases.' The activities of the chemists pertained to physics, not medicine, where Hippocrates and Galen should continue to rule.[232]

In other faculties, however, the initial prejudice against iatrochemistry broke down more quickly. At Montpellier, for instance, where the continued presence of students from Protestant Germany and the Netherlands must have encouraged the assimilation of the new philosophy, a student dissertation referred

[229] Iatrochemical works were reviewed in the *Journal des sçavants*, the popularizing scientific journal (the first in Europe) founded by Denis de Sallo (1626–69) in 1665.

[230] Sylvius announced his chemical views as early as 1641, although his collected works only appeared in 1680. But Willis only published his first work *De Fermentatione* in 1659.

[231] BFMP TMP in fo., viii, no. 1163, 'An *chylosis* [Greek] praevia fermentatione perficiatur?'. Mattot's thesis of 1665 attacked the belief that the heart's systolic movement was the result of the blood's fermentation, rather than the heart's pulsative faculty. Galenists used the term 'coction' when describing the process of any humoral creation or change in the body; it reflected the fact that they saw the process as analogous to cooking.

[232] BFMP TMP in fo., viii, no. 1348, 'An a salibus fermentationis motus?'.

positively to the new medical philosophy as early as 1674,[233] and by the early 1680s the Faculty was completely under the iatrochemical spell.[234] By the same date, too, the Caen Faculty had been converted, thanks in particular to the evangelical efforts of the Protestant professor Matthieu Maheul(s)t de Vaucouleurs (1630–1701). Vaucouleurs may have been the first medical professor in France to show a sympathy for iatrochemical ideas, for as early as 1664, in an oration to celebrate the beginning of the academic year, he had given an account of chylification which amalgamated the Galenic and chemical position.[235] By the early 1680s students who sustained dissertations under his aegis were outspoken champions of the new philosophy and consistently deployed a fermentationist discourse.[236] Typical was the thesis sustained by Robert Le Nud in 1682 on the cause and cure of fevers. According to Le Nud fevers had their origin in a bad ferment in the blood, which led to excessive haemal velocity and heat, and eventually haemal effervescence. Their cure, he argued, was phlebotomy, a traditional solution but one whose justification now lay in the way in which letting blood encouraged a benign ferment. Fermentation, he believed, only occurred properly when the passages of the blood were not full, as could be proved by the fact that 'when containers [*vases*] are filled and closed nothing ferments, but if they are opened, then they begin to ferment strongly'.[237]

Iatrochemists had answers for everything. Even actions within the body that the Fernelians had believed were occult were now, it seemed, open to rational scrutiny. Chemical analysis allowed the noxious humours of the most secret complaints, such as venereal disease, to be described and the action of their

[233] The first Montpellier student known to support iatrochemical ideas was Louis von Hammen in 1674: see the collection of his dissertations in BL 1185 f 4 (17); an iatrochemical account of chylosis is stated briefly in the thesis entitled: 'An in apoplexia venae-sectio praeferenda emetico?' (p. 1).

[234] There are many exx. of iatrochemical dissertations from Montpellier in the first half of the 1680s: see BL 1185 f 3 (11, 12 and 13) and 1185 f 4 (19) for collections by Bertrand Larard, Charles-François Horin, Johann Gabriele Schmeidt, and Ernest Gottfried Heyseum. Students from Germany and the Netherlands continued to study at Montpellier after the Revocation of the Edict of Nantes, for this was expressly permitted by Louis XIV in an edict of 29 Oct. 1685: see Dulieu, *Médecine à Montpellier*, iii/1. 73. Another factor encouraging a positive attitude towards the new medical philosophy at Montpellier was the presence among the town's doctors of France's leading exponent of the iatrochemical school, Raymond Vieussens (*c.*1635–1715): see Debus, *French Paracelsians*, 138–41.

[235] *Dissertatio de lacte* (Rouen, 1664), in AD Calvados 1D 991, no. 77. Vaucouleurs was part of the scientific circle which met at Caen in the 1660s and early 1670s under the patronage of the bishop of Avranches, Pierre-Daniel Huet: see David Lux, *Patronage and Royal Science in Seventeenth-Century France: The* Académie de Physique *in Caen* (Ithaca, NY, 1991), *passim*.

[236] Caen, like Montpellier, had close links with the Netherlands, so that the ideas of Sylvius would have been quickly known; 140 Dutch medical students are known to have attended the Faculty between 1598 and 1688: see W. Frijhoff, 'Le Médecin selon Jacques Cahaignes (1548–1617)', *Lias*, 10 (1983), 196–7.

[237] AD Calvados, 1D 991, no. 75, 'An febris focus totum corpus?'.

specifics decoded. Thus, the Danzig (Gdańsk) student Johann Gabriele Schmeidt had no difficulty in explaining in a dissertation sustained at Montpellier in 1685 the reason why mercury was of use in curing the pox. Venereal disease was an acid virus which entered the body when its pores were opened through the friction experienced by the vagina and urethra during intercourse. The acid then entered the bloodstream where it caused a variety of unfortunate ferments. Quicksilver, if properly applied, alleviated the disease because 'the metal is an alkali fortuitously endowed with pores appropriate for receiving the virus, and can imbibe it itself and render the mass of the blood, which through the action of the acid has been somewhat thickened, more fluid'.[238]

To all intents and purposes by the mid-1680s professors everywhere, even at Paris,[239] had been won to the new philosophy, and ferments had replaced faculties as the fundamental explanatory tool of the physiology and pathology taught in the schools. It might seem, then, that when Louis XIV revoked the Edict of Nantes in 1685, making Calvinist Protestantism illegal in France, and Vaucouleurs and other Huguenot professors had to conform or lose their office, the curtain was not merely brought down on three-quarters of a century of state-supported religious toleration.[240] The mid-1680s was also a watershed in the history of French Galenism and brought to an end the dominance that Fernel had exercised over faculty teaching for an even longer period of time. However, even now, it would be wrong to conclude that the faculty acceptance of iatrochemical explanations meant that the long-standing Galenic grip on establishment medical philosophy had been finally released.

At the very most the death-knell of Galenism had only begun to toll. The appropriation of iatrochemical ideas did not destroy two underlying Aristotelo-Galenic assumptions: that the key to understanding health and disease lay in the formation and behaviour of the body's humours, and that the causes of humoral creation or vitiation lay in qualitative changes of state. The basic discourse of medical philosophy may have become ferments rather than faculties, and professors and students may have discussed fundamental physiological and pathological change in terms of acid–alkali reactions rather than alterations in temperament, but no explanation was offered of the mechanism of chemical reactions. Implicitly, physiological processes, like chylification, which had formerly been attributed to the facultative power of particular organs, were now attributed to the facultative power of chemical agents. Moreover, iatrochemical

[238] BL 1185 f 3 (13), pp. 68–70.

[239] Nicolas Bailly was in fact one of the last Paris students to discountenance iatrochemistry. In the same year (1683) iatrochemical ideas were positively endorsed by one Jean Duval: see BFMP TMP in fo., viii, no. 1357, 'An chymiae cognitio medico necessaria?'.

[240] Vaucouleurs conformed and professed until 1697 when he was too old to lecture; the latter fact is revealed in AD Calvados 1D 967, no. 4.

professors and students always described the effect of an acid–alkali reaction as a temperamental change of the traditional kind. Fevers, as we saw, continued to be understood as the body's response to an unnatural overheating of the blood. All that had really happened with the acceptance of iatrochemical ideas was that a new explanatory stage had been introduced between the facultative and temperamental levels. As a result, it remained usual to deploy Galenic temperamental accounts of health and disease alongside iatrochemical ones, and often, when for instance the interest was in describing the nature and treatment of a given disease, to use only a traditional language.[241] As a result, it is legitimate to speak of iatrochemical ideas being integrated into, not replacing, faculty Galenism in the 1680s. Again the plasticity of faculty Galenism allowed it to meet a potentially mortal challenge by changing its shape, if this time in a particularly dramatic way.

This point is brought home when it is realized that iatrochemical ideas were not necessarily packaged in this traditional manner. In the hands of some iatrochemists they were underpinned by mechanical not facultative principles, and chemical reactions explained in terms of the size and motion of the particles of which acids and alkalis were composed. This was a far more radical packaging of iatrochemical ideas, and one that demonstrated that iatrochemistry and iatromechanism—the other novel medical philosophy of the mid-seventeenth century—were not necessarily antithetical doctrines. Descartes's conception of physiology, as we saw, reduced man to a simple machine, wherein physiological change was accomplished according to the principles of hydraulics, and it was in this form that his ideas were developed by a number of sympathetic medical theorists in the second half of the century.[242] His description of the traditional elements, however, in terms of particles in motion paved the way for a mechanical explanation of chemical reactions, and thereby permitted chemists and iatrochemists to ground their ideas on the mechanical philosophy. A seminal French text in this regard was Nicolas Lémery's *Cours de chimie*, published for the first time in 1675. Lémery (1645–1715) was a Paris apothecary, and later in life a graduate physician of Caen and member of the Paris Academy of Sciences, a royal institution founded by Colbert in 1666 to promote the experimental phil-osophy in France. Lémery's particulate analysis of chemical substances offered French iatrochemists, within and without the faculties, a mechanist vocabulary on which to ground their medical philosophy, if they so wished.[243]

[241] e.g. the dissertation sustained by the Irish student John Meagher of Cashel at Caen in 1685, 'An in melancholias animi cura potior?', where the language is completely Galenic.

[242] For the dissemination of Descartes's physiological ideas, esp. in Italy where they were developed by Giovanni Borelli (1608–79), see G. Berthier, 'Le Mécanisme cartésien et la physiologie au XVIIe siècle', *Isis*, 2 (1914–19), 37–89, and 3 (1920–1), 21–58.

[243] For an analysis of Lémery's work, see Metzger, *Doctrines chimiques*, ch. 5. According to

The faculty converts of the 1680s clearly did not. Indeed, there is no mention of the mechanical philosophy at all in the dissertation record in the period 1660 to 1690. Graduates who emerged from the faculties, then, in these decades would have learnt nothing of the iatromechanical challenge to Galenic orthodoxy, either in its hydraulic or chemical form.[244] This was not because Descartes's medical philosophy was unknown. Indeed, although posthumously published, *De l'homme* had been written in the early 1630s and its contents were being discussed in the Paris salon run by the lawyer Henri-Louis Habert de Montmor in the 1650s.[245] Rather, it reflected the fact that at this date the mechanical philosophy was viewed as theologically suspect, and dogmatic supporters of mechanism were banned from the Academy of Sciences. Presumably, then, its challenge to Galenic medical theory was not thought powerful enough to warrant attention.[246]

In consequence, however eclectic the faculty course had become, it still retained most of its fundamental Aristotelo-Galenic features. There was no sign in the 1680s of the tremendous upheaval which would engulf faculty teaching in the last decade of the century and which will be described in a later chapter: the overthrow of formalistic and qualitative explanations and their replacement by some form of mechanist account.[247] The only hint of the impending *déluge* lay in an embryological thesis sustained by Alexandre Littré (1658–1725) in 1689 in which he rejected the two-seed reproductive theory of Hippocrates in favour of Harvey's ovist theory.[248]

Metzger (pp. 210–14 and 240–2), Lémery in the 1670s gave a well-attended, private course in the corpuscular chemistry at Paris.

[244] On the other hand, if the faculty professors ignored the corpuscular philosophy during this period, this was certainly not true of all physicians. A number of graduate physicians published iatrochemical works in the 1670s and 1680s which deployed a corpuscular approach: see François de Saint André (a Caen graduate), *Entretiens sur l'acide et sur l'alkali* (Paris, 1672; 3rd edn., Paris, 1680); Daniel Duncan (a Protestant of Montauban), *La Chimie naturelle ou l'explication chimique ou mécanique de la nourriture de l'animal* (Montpellier, 1682); and Bertrand, *Réflexions nouvelles sur l'acide et l'alkali et de l'usage que l'on en fait pour la physique et la médecine* (Lyons, 1683). These works are discussed in Metzger, *Doctrines chimiques*, 210–14 and 240–2, and Debus, *French Paracelsians*, 134–6 and 148.

[245] For the history and early reception of Descartes's physiological treatise, see René Descartes, *Œuvres philosophiques*, ed. F. Alquié (3 vols.; Paris, 1963–73), i. 207–15 and 307–8; Adrien Baillet, *La Vie de Monsieur Descartes* (Geneva, 1970 edn.), 428 (1st pub. Paris, 1691); and F. Bouillier, *Histoire de la philosophie cartésienne* (2 vols.; Paris, 1868), i. 444–5. On the activities of the Montmor academy, see esp. H. Brown, *Scientific Organizations in Seventeenth-Century France (1620–1680)* (Baltimore, 1934).

[246] Descartes's philosophy was seen as a threat to certain fundamentals of Tridentine Catholicism, esp. transubstantiation: see D. Clarke, *Occult Powers and Hypotheses: Cartesian Natural Philosophy under Louis XIV* (Oxford, 1989), ch. 1. For the crown's refusal to elevate dogmatic mechanists to the Academy of Sciences before the late 1690s (when Lémery for one was admitted), see R. Hahn, *The Anatomy of a Scientific Institution: The Paris Academy of Sciences 1666–1803* (Berkeley & Los Angeles, 1971), ch. 1.

[247] See below, Ch. 7, Sect. B.

[248] BFMP TMP in fo., ix no. 1423, 'Estne chylus foetus alimentum?'.

Harvey, the Aristotelian, had argued in his *De generatione animalium* of 1651 that animals were created by a conjunction of active male spirit and inactive female matter. But he had also given the Aristotelian one-seed theory a radical edge by insisting that the traditional separation of the animal kingdom into oviparous and viviparous creatures was otiose: all animals were created from eggs, viviparous animals merely hatching their eggs in the womb.[249] Despite the widespread dissemination of Harvey's ovist embryological ideas, and the empirical support they received in the 1660s and 1670s from many anatomists, including the academician Joseph du Verney (1648–1730) in France, the faculties had remained wedded to the traditional theory.[250] A typical reaction can be found in the highly critical thesis sustained by the Paris bachelor François Le Rat in 1677.[251] Littré, later a famous foetal anatomist himself, is the first Paris student known to have challenged faculty orthodoxy.[252] Moreover, he presented Harvey's ideas themselves in a particularly radical way. Harvey was an epigeneticist: he believed that the foetus was initially an inchoate mass, which gradually took a distinctive animal shape over the period of gestation. Littré, in contrast, was a preformationist. The foetus, he claimed, was ready-formed in the egg, waiting to undergo expansion after fertilization by the male seed. Preformation was a mechanist addition to Harveian embryology, the consequence of the inability of Descartes's supporters to explain the growth of the foetus mechanically. Littré, then, was challenging more than embryological orthodoxy when he sustained his thesis in 1689: he was implicitly challenging the Aristotelo-Galenic tradition *tout court*.[253]

G. The Theory of Medical Practice

As we have seen, the medical philosophy espoused and transmitted in the medical faculties down to the last decade of the seventeenth century was grounded

[249] Pagel, *Harvey's Biological Ideas*, 233–323.

[250] The best account of the new embryology is Roger, *Sciences de la vie*, 163–444.

[251] BL 1182 e 1 (163), 'An viviparorum foetus ex ovo?'.

[252] Admittedly, as early as 1674 one Montpellier student, Louis Von Hammen, supported the reality of ovarian eggs: see 'An conspicua in mulierum testibus ova, hominumque, ex iis generatio?', in BL 1185 f 4 (17), pp. 26–8.

[253] This point is explored in L. W. B. Brockliss, 'The Embryological Revolution in the France of Louis XIV: The Dominance of Ideology', in Dunstan (ed.), *Human Embryo*, 169–75. For preformationist ideas, besides Roger, *Sciences de la vie* (n. 250, above), see P. J. Bowler, 'Preformation and Pre-Existence in the Seventeenth Century: A Brief Analysis', *Journal of the History of Biology*, 4 (1971), 221–44. Ovist preformationism was developed by the Dutchman Jan Swammerdam (1637–80), in works published in 1669 and 1672. Ironically Descartes himself had attempted to construct a mechanist and epigeneticist account of foetal growth in his brief 'La Description du corps humain et de toutes ses fonctions' (pt. iv) (1st pub. 1664): see his *Œuvres philosophiques*, iii. 829 ff.

in a plastic, pluralistic, and polyvalent Galenism, and was highly eclectic in its orientation. A similar eclecticism obtained in faculty teaching on practical therapeutics. Although professors regarded transmitting orthodox and correct medical learning as their main task, they were also aware that they were teaching a group of individuals, most of whom, once they had graduated, would go on to seek their livelihood as physicians. For the latter, the crux lay as much in the practice as in the precepts of medicine. To be successful private practitioners—as we shall see, the opportunities open to graduates to practise in any other way (notably as hospital, municipal, or court physician) were extremely limited—students required instruction in practical therapy.

Although, as we have seen, professors believed that each malady was a unique and plastic event, whose genesis, development, and treatment depended greatly on the temperament of the patient, this did not mean that they were unable to lay down fairly precise therapeutic guidelines.[254] Just as individual afflictions could be reasonably securely related to a disease-type, so symptomatically similar complaints were expected to respond to a particular, albeit flexible, pattern of treatment. In the sixteenth century medical students would have picked up their theoretical knowledge of medical practice haphazardly from the professorial analysis of the key Galenic and Hippocratic texts. In the seventeenth century, however, professors, apparently on the prompting of their students, began to give specific courses in practical medicine, where alumni were introduced in an ordered fashion to the cause, progression, and treatment of particular diseases. Professors would begin with diseases of the head (the noblest part) and work downwards to the abdomen. Usually, a final section of the course would be devoted to the many different types of fever, which were the immediate result of the non-localized inflammation and putrefaction of the blood and occurred independently of the localized diseases already described.[255] The practical medical course offered the student a hotchpotch of therapeutic observations and potential remedies drawn from classical and Arab writers, popular culture, contemporary physicians, and personal experience.[256] The most famous course of practical medicine was the one published by Riverius of Montpellier in 1640. Riverius, it seems, had been unwilling to commit his course to print, but had been forced to do so, when pirated editions began to appear.[257]

[254] See above, Sect. C.

[255] Many localized diseases, of course, were also accompanied by fever. No standard typology of fevers was developed in the 17th cent., for some physicians identified only three species (ephemeral, putrid, and pestilential), while others believed the list was considerably longer. Intermittent fevers were a particular problem: were they a separate species, or a variety of putrid fever?

[256] Hence they are a useful source for biographical information about professors.

[257] *Praxis medica*, 'lectori benevolo' (dated 1653 according to the 1657 edn.), where Riverius also says that he had begun a course in therapeutics under student pressure: Riverius's course was

ILLUSTRATION 7. Lazare Riverius aged 64. Frontispiece to his *Praxis medica cum theoria* (9th edn., Lyons, 1657). Riverius (1589–1655) was professor of medicine at Montpellier from 1622 and author of a number of widely disseminated medical textbooks. Although a committed Galenist, his *Praxis medica* was still being championed as the best introduction to the subject in the mid-eighteenth century. The caption reads: 'If you see this picture, you will swear it is Riverius; if you read this book carefully, you will swear he is Hippocrates'.

One of the primordial principles a student was taught was that physicians should attack all but the most trivial of complaints with every weapon in the medical arsenal. In order to alleviate the most distressing symptoms of a disease, remove the peccant humour, resolve any consequent qualitative imbalance, and fortify the corroded parts, physicians were taught that in normal circumstances patients would have to be bled, purged, bathed, rubbed, anointed, and placed on a regime. Although practitioners were urged to work with nature and in consequence were taught that the purpose of medical treatment was to promote nature's attempt to expel the harmful humour on the appropriate critical day,[258] this did not stop professors from often counselling a highly interventionist therapeutics. The more acute the disease the more intrusive should be the physician, for it was the physician's duty to do everything he could, if only to allay the anxiety of family and friends.

According to the Aix professor Jacques Fontaine, the victim of an apoplectic fit, for instance, was to be spared no indignity. Everything had to be done to free the cerebral passages (whose blockage had caused the stroke) and stimulate the senses. The standard treatment was to draw blood (repeatedly) and administer a purgative and perhaps an emetic of white hellebore. Fontaine, however, suggested a variety of additional means of restoring consciousness. A mustard compress was to be fixed to the patient's shaved head and a tube inserted into his nose, filled with *inter alia* hellebore, pepper, and muscat, while a vesicatory made chiefly from beetles was to be applied to his shoulder. If more drastic measures were needed, then aqua vitae was to be poured over the shaven head, and the spirit set on fire with a candle. Finally, Fontaine suggested that the patient's bed should be placed on wheels and moved around with as much noise as possible.[259]

Professors who suggested that in some acute diseases it was wise to leave patients alone were dissenting voices. Thus, few in the period would ever have agreed with the counsel Matthieu Chastelain proposed, in a dissertation sustained at Montpellier in 1659, that pestilential fevers (that is, fevers in which the

still being cited approvingly in the mid-18th cent.: see Jean Astruc, *Mémoires pour servir à l'histoire de la faculté de médecine de Montpellier* (Paris, 1767), 259–60 (biographical note on Riverius). However, Riverius was not the first professor to publish a course: see also Jacques Fontaine (Aix), *Practica curandorum morborum corporis humanis, in quatuor libros distincta* (Paris, 1611[?]); and Nicolas Abraham sieur de La Framboisière (Reims), *Canonum medicinalium liber tres* (Paris, 1595): the title, given the contemporary attitude to Avicenna, is interesting. Given the importance of Riverius's text, it will be referred to constantly below.

[258] Supposedly in every disease there were predictable critical days when the peccant humour would be normally perfected or 'cooked', and therefore more easily removed.

[259] *Practica*, 95–101. He also (and this was at the turn of the 17th cent.) claimed that some physicians used quicksilver *in extremis*. Riverius fifty years later certainly promoted the use of antimony wine on the grounds of personal experience: see *Praxis medica*, 9. Apoplexy, of course, was a disease where the chance of recovery was recognized as slim.

body was attacked by a poison, as was deemed to be the case in the plague) should not be treated, on the grounds that medical intervention made matters worse.[260] It was certainly not the view of the omniscient Riverius, whose vacant chair Chastelain was anxious to fill.[261] In offering his own account of how [illegible] fevers could be treated successfully Riverius rang the therapeutic [illegible] particular, he insisted that malignancy in pestilential fevers could [illegible] an antidote. The best, to be sure, was bezoar stone (*lapis bez*[illegible] tion found in the stomach or intestines of ruminants. [illegible] concretion, that hailed from the Orient, was diff[illegible] seventeenth century. Instead he suggested either [illegible] came from the Indies and was eaten by animals [illegible] intestines contained bezoars, or the favoured Montpellier substitute, viper troches.[262]

Of all the many weapons that the physician could bring to bear in fighting disease, the simplest was regimen. Indeed, students were taught that this on its own would be sufficient in simple diseases. Thus, in the case of ephemeral fevers, which were usually the result of overindulgent exercise (too much sex, unnecessary anger, and so on), it was believed that the body could be quickly returned to its natural condition by immersion in cold water and a diet of cold and humid food, such as fish.[263] In more serious diseases, a regime was to be ordered which would help rather than hinder the work of more complex remedies. Little need be said in this regard, for the suggested changes in regimen were standard and commonsensical (in Galenic terms). The patient's food and drink, the air he breathed, the amount of exercise he was to take, even his sex life,[264] all depended on the basic quality of the disease. Someone suffering from dropsy (a humid and cold disease) had to be given warm, dry food and placed in a warm, dry atmosphere, while the patient was to be encouraged to drink as little as possible, and then only wine, never water. As the well-to-do could seldom put up with being thirsty for long, Riverius concluded that the poor rustic had a better chance of surviving this particular disease than the rich town-dweller.[265] The new regime, it must be stressed, was only to last as long as the disease. There was no suggestion that the patient should change his way of life permanently.

With serious diseases, which required real medical intervention, the first line

[260] 'An febri pestilenti apparanti parotide purgandum et vena secunda', in M. Chastelain, *Quaestiones medicinae duodecim* (Montpellier, 1659), Q. 11: see BN T31–259.

[261] The dissertation was sustained as part of the competition to find Riverius's replacement. Chastelain died before taking up his chair.

[262] *Praxis medica*, 350–6. Bezoar stone was an Arabic remedy. A troche was a lozenge-shaped medicinal cake.

[263] Fontaine, *Practica*, 508.

[264] Sex was generally banned, but sexual activity was thought a cure for inveterate dysentery: Riverius, *Practica medica*, 177.

[265] Ibid. 203 and 206.

of attack that the student was taught to consider was usually phlebotomy. Throughout the sixteenth and seventeenth centuries, drawing blood by means of slitting a vein beneath a ligature was universally described as the queen of remedies, and nearly always advocated not just as the first but the safest step for a physician to take. Its wisdom lay in the fact that reducing the amount of venal blood in the body was judged both to alleviate the symptoms of a disease (such as pain and/or fever) and evacuate (in part) the peccant humour. Its great virtue as a remedy was that it worked quickly and its operation was totally under the physician's control. A physician could see how much blood was drawn and any change that occurred to its consistency or colour, whereas he could not know what was happening to humours inside the body when it was purged.[266] Indeed, there were occasions when a body might be bled but certainly not purged, as, for instance, at that moment in the course of a pestilential fever when the skin erupted in pustules as nature attempted to evacuate the poisonous humour.[267] At this moment, according to the Montpellier physician Charles Barbeyrac (1629–99) in 1658, whereas phlebotomy helped nature achieve its purpose, purgation worked in a contrary fashion 'for it revokes the malignancy to the centre [of the body], ferments and sharpens the poison, and incites violent diarrhoea [*alvi fluxum*], which is usually fatal'.[268]

In serious diseases, where doubts were raised against the use of phlebotomy, it usually reflected the fear that the patient might not be strong enough to bear a heavy loss of blood. For this reason phlebotomy was not judged a remedy to apply indiscriminately to a patient suffering from an ulcerated lung or phthisis, admittedly a disease which physicians felt was virtually incurable anyway.[269] Nor was phlebotomy always countenanced in dysentery, although none objected to the practice outright, provided that the cause was not deemed to lie in a blockage (*suppressio*) of the liver.[270] The general rule was that in diseases where

[266] For representative student theses on the superiority of phlebotomy to purgation, see BFMP TMP in fo., iii, no. 508, Michel Seguyn (usually Seguin), 'Utrum in acutis raro purgandum?' (1615); BL 1185 f 3, no. 1, Jacques Didier (Montpellier), 'An praemittenda sit in acutis purgatio?' (1648); Bibliothèque de l'Arsenal (Paris) MS 970, no fo., André Le Bidois (Caen), 'Utrum in orgasmo *phlebotomia paukrerson* (Greek)?' (1656).

[267] The eruption of pustules was what differentiated pestilential fevers from other types: see Riverius, *Praxis medica*, 342–3.

[268] 'An erumpentibus variolis, et bubonibus pestilentibus purgatio, et venae sectio', *Quaestiones medicae duodecim*, Q. 10, pp. 17–18 (in BL 1185 f 3, no. 8, dissertations for a vacant chair, 1658; his bid was unsuccessful). In later life the Calvinist Barbeyrac became renowned as a clinician *avant la lettre*, although he has left no written records of his activities as a medical practitioner.

[269] e.g. Riverius, *Praxis medica*, 120–8.

[270] J. Fontaine, *Practica*, 381. Other causes of dysentery included intestinal ulcers, which were the result of an excess of black or yellow bile or a salty phlegm. For a less careful analysis, see Riverius, *Practica*, 173.

the patient was likely to grow gradually weaker, phlebotomy should be used only at the outset.

On other occasions when a question mark was raised against the remedy, it was not because the patient was too weak, but because phlebotomy could aggravate the cause of the disease and precipitate death. This was true, for instance, where an apoplexy was traced to a phlegmatic rather than a sanguineous cerebral blockage, for in such cases physicians cited the view of the Roman physician Celsus (*fl.* AD 25) that bleeding the patient either worked or was fatal.[271] It was also true when a patient was the victim of bubonic plague. Fernel in the mid-sixteenth century had denied the efficacy of bleeding in cases of the plague,[272] and his opinion was generally accepted in the first half of the seventeenth century by both supporters and opponents of his belief that plague was an occult disease.[273] Riverius, for instance, accepted that in other pestilential fevers it was legitimate to draw blood, provided the physician bled immediately and paid due care to the fact that bleeding could affect the vital faculty, already under attack from the malignant and poisonous quality which had invaded the bloodstream. Where the plague was concerned, however, Riverius believed that phlebotomy was so dangerous as to be foolhardy, and physicians should listen to the accounts of the fatal consequence of the practice left by many medical practitioners.[274]

With these exceptions, professors advocated drawing blood in every illness, provided the patient's strength allowed it. Indeed, even if patients were judged too weak to be phlebotomized, physicians were often encouraged to draw blood by less drastic means, generally by cupping with scarification, although leeches were sometimes suggested.[275] What divided professors to a degree was not the desirability of bleeding in most instances, but the site of the vein to be cut. In cases of apoplexy there was some debate over whether blood should be taken from the jugular vein. The Montpellier physician Rondelet seems to have opposed the practice in the mid-sixteenth century but physicians in the following century thought the section feasible if difficult. Riverius cited Abraham Zacutus of Portugal (1575–1642) who claimed to have deployed the technique

[271] e.g. La Framboisière, *Canonum medicinalium libri tres*, 69[b].

[272] *De abditis rerum causis*, 139.

[273] Jean Riolan the Elder, 'Generali methodus bene medendi', in id., *Opera*, 382–3, believed a vein could be opened if the body was in a state of plethora.

[274] *Praxis medica*, 350–1. Riverius noted that sometimes even in epidemics where there was only a minor malignancy, phlebotomy could be deadly, and he cited the Brabantine physician Jean Wierus's account of the disastrous effects of bleeding the victims of a catarrhal epidemic in 1584. Wierus (1515–88) is remembered for his sceptical attitude to witchcraft.

[275] Cupping was promoted in many diseases as a supplementary not just an alternative way of drawing blood. Cupping drew the peccant humour/spirit to the skin's surface, which was then released by slitting the skin with a knife (scarification): see the particularly good description in Guillemeau, 'Les Opérations de chirurgie recueillies des anciens médecins et chirurgiens' in id., *Œuvres*, 701–3.

with success.[276] The most famous debate was over the side of the body to be opened in cases of pleurisy. Avicenna had argued that blood should be drawn from the elbow of the arm opposite the affected side, but this was challenged in the mid-sixteenth century by the Paris physician Sylvius (although his pupil Vesalius continued to follow the Arab's method), and it became generally accepted thereafter that pleuritics should be bled from the arm nearest the seat of the pain.[277] As Fontaine explained, this was not to deny the Galenic doctrine that cures were effected by their opposites, for the arm on the affected side was opposite the inflamed part.[278]

The approval of phlebotomy, it must be stressed, was ubiquitous. From the evidence provided by the textbooks, there was little apparent difference in this respect between Montpellier and Paris. However, it may have been the case that the Paris Faculty (at least some of its members) supported a much more intensive recourse to phlebotomy than their colleagues in the Midi. Certainly this was the accusation levelled publicly against the Paris Faculty in the 1640s by the dean of the Montpellier Faculty, Simeon Courtaud, and the charge was reiterated anonymously towards the end of the seventeenth century. To their critics, Parisian doctors were bloodsuckers who advocated and deployed a novel and dangerous use of phlebotomy in that the Parisians both bled to excess and neglected to use other pharmaceutical remedies.[279]

Of course, the charge may well have been a rhetorical ploy, for, as we shall see, Courtaud and his unknown imitator were trying to blacken the Paris Faculty's reputation in order to gain legal support for ending the Faculty's monopoly of practice in the capital.[280] Montpellier physicians were hardly cautious phlebotomizers, moreover. In fact, Riverius, at the very time Courtaud was denouncing his Parisian colleagues, was frequently urging Montpellier students to bleed until the patient lost consciousness, and advocating in the case of

[276] *Praxis medica*, 8; J. Fontaine, *Practica*, 96 (for Rondelet). Zacutus was a Jewish physician who practised and published in the United Provinces.

[277] Paris students inevitably supported the new method but there was one exception: see BFMP TMP in fo., iii, no. 534, Denis Allain, 'An pleuritidi oppositi cubiti phlebotomia?' (1616). For the more usual view, see ibid., no. 472, Egide Le Blanc, 'An pleuritides, ut hyeme frequentiores, ita periculosiores?' (1614).

[278] *Practica*, 205–6 (for Vesalius). See also La Framboisière, *Canonum medicinalium libri tres*, 96b; Riverius, *Praxis medica*, 108. The question of which side to bleed was still debated in 1683: see Charles François Horin (Montpellier), 'An pleuritidi venae sectio ex eodem latere', Q. 3 in a set of licentiate's theses, in BL 1185 f 3, no. 12, pp. 24–9.

[279] Simeon Courtaud, *Monspeliensis medicorum universitas, oratio pronunciata die vigesima prima mensis Octobris anni MDCXLIV*...(Montpellier, 1645), 24–32; 'Requeste importante pour les médecins de la Chambre royale contre les médecins de la faculté de Paris [1694]' (printed), in AD Vaucluse D 61, pp. 13–14.

[280] For the machinations of the Montpellier Faculty and the Chambre Royale, see below, Ch. 5, Sect. E.

certain diseases repeated phlebotomies. Thus, in cases of pleurisy, students were instructed to bleed their patients once or twice a day until the fever and pain had subsided; and in cases of peripneumonia they were encouraged not to fear to bleed their charge five or six times.[281]

There again, leading members of the Paris Faculty in the mid-seventeenth century certainly gloried in their use of frequent phlebotomies. Gui Patin, for instance, boasted (albeit in a letter) that he had bled his wife on twelve occasions when her chest was inflamed, and had once bled a 12-year-old child thirteen times in fifteen days.[282] According to Jean Riolan the Younger, writing in defence of the Faculty's monopoly of medical practice in the capital in 1650, the Parisians' recourse to frequent and heavy phlebotomy was justified by climatic and geographical reasons. The lazy, meat-eating inhabitants of northern France produced more blood than their sober southern cousins, and, in consequence, needed more rigorous bleeding. Moreover, the air between Paris and the Loire was 'relatively heavy and cold', the air towards the Mediterranean 'more subtle and warm', which was the reason so many people bled in the south, 'swoon and even have convulsive fainting fits ... especially those of a bilious temperament'.[283]

It cannot be coincidental, however, that the members of the Faculty who supported copious bleeding were all anti-Fernelians. This group, it will be recalled, were not just opposed to the use of Paracelsian remedies but were anxious to simplify traditional pharmacy by the removal of all exotic drugs.[284] Arguably, their peculiar emphasis on phlebotomy was part and parcel of their drive to simplify therapeutics, and was not representative of the general position in the Paris Faculty. Significantly, by the 1690s a Faculty spokesman was urging that phlebotomy was a powerful remedy but one that must be used moderately and prudently. Repeated phlebotomy, he insisted, could be dangerous and had been frequently attacked in print by a number of Faculty doctors.[285]

The predominant view of phlebotomy in sixteenth- and seventeenth-century

[281] *Praxis medica*, 110, 112–14.

[282] For Patin and phlebotomy, see F. Meyer, 'Sciences et pratique médicales au XVIIe siècle', in *Madame de Sévigné, Molière et les médecins de son temps* (Actes du Centre méridional de Rencontres sur le XVIIe siècle; Marseilles, 1973), 106.

[283] *Curieuses Recherches*, 240–1; part of a general defence of the Faculty's approach, pp. 223–50. Much the same point is made in a letter from Patin to Spon of 16 Apr. 1645: Patin, *Lettres*, i. 353–4.

[284] See above, Sect. E.

[285] [Anon.], *Réponse pour la faculté de médecine de Paris à l'écrit qui porte pour titre, Requeste importante pour les médecins de la Chambre royale* (n.p., n.d. [1694]), 37. The copy used is in the Bodleian Library, Oxford, Lister F 130(2). For an ex. of a student dissertation in the early 1690s which affected a more reserved approach to phlebotomy, see Claude Bourdelin (1667–1711), 'Estne phlebotomia omnium magnorum morborum princeps et universale remedium?', in BFMP TMP in fo., viii no. 1447.

France was thus that phlebotomy was the queen of remedies but only the first arrow in the physicians' quiver. If the peccant humour was to be completely dispelled and the body restored to normal health, then the doctor had to have recourse to pharmacy. A knowledge of the different drugs that could be used with profit in countering particular diseases was seen to be the key to effective medical practice, and the major part of the professorial course was devoted to explaining to students which drugs to use and their composition and action.

It was essential to ensure first of all that the drug was properly prepared with the right ingredients: hence the stress from the early seventeenth century on medical students studying botany and pharmacy, so that the physician could keep a watchful eye on the apothecary. It was also essential to ensure that the ingredients were genuine. Too often when a drug was difficult to obtain because it had a remote, overseas provenance, such as the pestifuge *lapis bezoardicus*, vendors supplied ineffective substitutes.[286] Moreover, even when the same substance was universally available and might be found all over France, its medical virtue was not identical everywhere. According to the Fontenay-le-Comte physician Sébastien Colin, the environment changed the temperament of the plant as it did the temperament of mankind. Normally, for instance, the mushroom fungus agaric was a mild emetic, but the agaric of Dauphiné had a violent effect. The use of drugs whose ingredients were obtained from the wrong location could be lethal.[287]

Drugs could be administered in many ways. They could be swallowed as pills or potions; they could be taken as enemas; or they could be applied externally in the form of poultices. The method chosen depended in part on the state of the patient and the site of the disease. Often it was believed that a drug could best fulfil its purpose if it was administered in various ways at the same time. In normal circumstances, for instance, it was thought that the intestinal ulcers present in cases of dysentery were best cleansed and resolved by detergents, then glutinous and astringent agents applied in the form of a clyster, a rectal injection administered by a syringe. At the same time, though, patients ought to be given these drugs by mouth, since the upper intestine could be ulcerated, a part of the abdomen that clysters would have difficulty reaching.[288]

In most diseases, students were taught that the first drug to be given, once the patient had been bled, was a purgative, on the grounds that it was essential to evacuate fully the internal cause of the disease, before proceeding to salve the lesions to which it had given birth (such as intestinal ulcers). But professors were also alive to the fact that in some cases the patient was in great pain, and in

[286] Riverius, *Praxis medica*, 355.

[287] [Colin], *Déclaration des abuz*, 67. Presumably Colin did not realize there are various species of agaric.

[288] Riverius, *Praxis medica*, 173–4.

cases of the stone, for instance, advocated initial recourse to soothing clysters and poultices, and even narcotics. Only then should purgation begin. The physician, too, must be alive to the patient's symptoms in deciding whether other forms of evacuation be tried. Thus, patients were frequently to be given emetics if the disease was located in the upper part of the body, or they felt nauseous, and sweating agents could be applied as a supplementary aid. Physicians had conflicting views over the wisdom of using alternative forms of evacuation in particular diseases, however. Fontaine, in his discussion of the treatment of dropsy, was very keen that the body should be made to sweat. This could be achieved in several ways, he suggested, including by placing hot stones soaked in white wine and wrapped in cloths on the patient's body. Riverius, in contrast, opposed the use of *sudorifica* in dropsy, for the disease, he argued, had a cold, wet cause and it was difficult to get the patient to sweat effectively.[289]

Whatever the way in which a drug was to be administered or whatever its purpose, it was nearly always a complex concoction, created from a mixture of several plants, animal products, and occasionally minerals. One ingredient might certainly be given pride of place, to the extent it would appear as a constituent feature in the composition of several different drugs that could be used to fight a particular disease, but it would never be prescribed on its own. These concoctions, it must be stressed, were often very individualistic recipes. Although certain favoured ingredients might appear in all prescriptions for a particular disease, it is evident that professors passed to their students their own secret remedies, or the secret concoctions of their favourite physicians (ancient or modern).[290] As a result, the apothecary was clearly expected to compose afresh each drug prescribed: there was no standard prescription. In fact, the only drugs which the apothecary would have kept ready-made in his shop for most of the period were the antidotes theriac and mithridate, used, as we have seen, to fight the plague and other malignant diseases.[291] The reason for this lay in the complexity and expense of the two remedies. Theriac, invented by Galen but by the seventeenth century composed in many different ways, had upwards of seventy ingredients, the chief being viper flesh. In the large towns in France, it was composed annually by one of the apothecaries, in a ceremony graced by

[289] J. Fontaine, *Practica*, 363; Riverius, *Praxis medica*, 205.

[290] Of course, as many professors published an account of their remedies, they quickly ceased to be secret. Medical students at Montpellier collected recipes during their studies, not only taking down the pet remedies of their professors, but copying out (often illegally) the personal prescriptions of other physicians practising in or visiting the town: see F. Platter, *Beloved Son Felix*, 83–6, 125.

[291] Theriac was also commonly used to strengthen a patient during or at the decline of a disease. In cases of quartan fever (malaria?), given two hours before a paroxysm was anticipated, it supposedly strengthened the victim and reduced the rigour of the attack: see J. Fontaine, *Practica*, 564.

his fellows and representative physicians, and then distributed among his colleagues. In smaller towns apothecaries would purchase theriac from travelling salesmen who supposedly had bought the antidote from Montpellier apothecaries at the Beaucaire fair.[292]

In any concoction members of the vegetable kingdom were usually the dominant ingredients (theriac was peculiar). All parts of a plant or tree could be recommended: roots, seeds, flesh, or flowers. Most vegetable components were chosen for their general purgative, emetic, diuretic, or absorbative quality. The same plants, then, might be prescribed for several diseases, especially those related by location or nature. But there were also many vegetable specifics. We have already encountered the promotion of peony root (picked, or not as the case might be, under a waning moon) as a much-vaunted remedy for epilepsy. Others were more idiosyncratic. Before Riverius none seems to have followed Fernel in promoting marsh mallow as a mild dissolvent of kidney stones.[293] Most vegetable components were also drawn from the native flora, but long before cinchona-bark or quinine and ipecacuanha began to be promoted as remedies for fevers and dysentery, students were being directed towards exotic imports. Cassia was always recommended as a mild purgative, while several plants from the New World were quickly established as specifics. Guaiac, for instance, was widely supported as a cure for mild attacks of venereal disease, on the grounds that specifics were to be found in the place where a malady originated.[294]

Every drug, however, had to have at least one ingredient from the animal realm. The use of a wide variety of reptiles and mammals was advocated, and primarily in the case of epilepsy, even human remains were thought to be efficacious. Sometimes a particular part of the animal anatomy was championed. The unstated assumption was that the part favoured contained the requisite quality in its purest form, although there was undoubtedly a deeper anthropological significance to the choice. Epileptics were to be given a drug which contained the shavings of a human skull, some thought of a man who had met his death by hanging or other violent means.[295] The dry quality of a boar's tooth or a bull's

[292] Dulieu, *Pharmacie*, 84–8; Rambaud, *Pharmacie en Poitou*, ch. 22. Each shop would have a special theriac jar to keep the precious mixture. As we shall see, the late 17th cent. witnessed the growing popularization of new 'ready-made' medicines sold illegally or on government licence by medical interlopers: see below, Ch. 10, Sect. A. It is possible then that by the end of the period apothecaries had drugs other than theriac permanently on their shelves.

[293] Riverius, *Praxis medica*, 227.

[294] See esp. Bibliothèque Mazarine (Paris) MS 3608, 'Tractatus de lue venerea', *c.*1655 (from the *cahiers* of the Caen student André Le Bidois), no pagination. Some students in their dissertations argued that guaiac did not work: e.g. Pierre Bourdelot (1610–84), 'An in curatione luis venereae balneum?' (1639), in BFMP TMP in fo., v, no. 874. Bourdelot, an abbé, gained renown as a gout doctor.

[295] See BFMP TMP in fo., iii, no. 387, Gabriel Biard, 'An in epilepsia quid occultum?' J. Fontaine, *Practica*, 77, and Riverius, *Praxis medica*, 22, say nothing about the form of death. The

penis was judged to be particularly good for reducing phlegm in pleuritic cases.[296] The blood of a he-goat was an important ingredient in making a lithontriptic. So, too, was wolf's blood, 'as experience will demonstrate, if a little stone is placed in this liquid'.[297] Animal excrement was also included in many recipes: pigeon dung was judged to be of use in epilepsy, horse-manure and the droppings of white hens in pleurisy.[298] Sometimes the animal products had to have more than a simple qualitative affinity with the plants that were to be used. In the concoction of lithontriptics, it was insufficient that the drug contained the blood of a he-goat. It was also important, according to Riverius, that the goat had been fed for a month on pimpernel, juniper berries, and other diuretic plants that the drug was to include.[299] The animals, also, had on occasion to be properly slaughtered. Riverius equally noted the use of he-goat's blood as a specific in pleurisy, but in this case the blood had to have been specially prepared. 'Suspend the he-goat by his horns, and cut off their blood supply; castrate the animal and collect the blood in a large vessel; then dry [the blood] in the sun if it is summer, or in the back of a miller's oven.'[300]

Metals, in contrast, were only infrequently included in professorial recipes, even in the seventeenth century. Although the faculties came to accept the therapeutic possibilities of an increasing number of metals formerly thought to be poisons, their use was not advocated indiscriminately. Rather, compositions that contained representatives from the metallic as well as the vegetable and animal reigns tended to be classed as violent and strong drugs, only to be deployed once others, more anodyne, had failed. Riverius, for instance, was both knowledgeable of and sympathetic towards the Paracelsians' remedies, but he was only a cautious advocate of their use. Thus, when treating an apoplexy, he taught that initially physicians should purge their patients with a drug which contained primarily turpentine and agaric. It was only if this failed (as he admitted was often the case) that the physician could resort to purging with an antimony-

use of a human skull in epilepsy was advocated in many theses: see esp. Pierre Haguenot (1609–67), 'An sanguinis humanus in curatione morborum usurpandum sit?', Q. 5 of a collection entitled, id., *Quaestiones medicae ... duodecim* (Montpellier, 1639), where the Montpellier doctor, exceptionally, justifies the use of human blood as a general therapy. Riverius, *Praxis medica*, 174, also thought that the human skull could be used to resolve ulcers in dysentery.

[296] This was favoured by the mid-16th-cent. Montpellier physician Rondelet, according to J. Fontaine, *Practica*, 209. Riverius, *Praxis medica*, 112, added the penis of a stag.

[297] J. Fontaine, *Practica*, 313; Riolan the Elder, 'Methodus ... medendi', 498–9. Riolan also suggested, following, he claimed, Matthiolous (Pietro Andreas Mattioli 1500–77, premier physician to the Emperor Maximilian II) using the powder of a stone from an ox's gall bladder. He-goat's blood had been supported by Avicenna.

[298] J. Fontaine, *Practica*, 77; Riverius, *Praxis medica*, 112.

[299] *Praxis medica*, 228. Lithontriptics were cordials which supposedly dissolved bladder stones.

[300] Ibid. 112.

based drug. In the same way mercurial purges, though recognized to be of particular value in treating epilepsy, were not to be used at the outset of the disease.[301] Furthermore, Riverius's attitude to the Paracelsians' own specifics, which were often heavily impregnated with metals, was ambivalent. He sometimes described concoctions associated with Henry IV's doctor Duchesne in particular, but never wholeheartedly promoted them. Thus, in his opinion, Duchesne's peony syrup, a specific given to epileptics, could only be used by the most prudent physician because of its vehemence. Riverius preferred to promote his own concoctions where a metallic soupçon was added to a primarily vegetable- and animal-based drug. His own prescription for an opiate to be taken as an anti-spasmodic by epileptics was a pot-pourri of traditional ingredients, laced with theriac and confection of hyacinth: peony, bugle, oak-wood, elk's nail, stag's horn, human skull, coral, pearl, and bezoar. To this rich concoction, he merely added three drops of spirit of vitriol.[302]

Metals, then, were generally to be used only in conjunction with the other two reigns. In fact, the only form in which faculty doctors permitted their consumption or absorption in isolation was in a diluted and natural state as mineral water. As we have seen, 'taking the waters' was a Paracelsian fad which French Galenic physicians at Montpellier had adopted as early as the final quarter of the sixteenth century.[303] By the turn of the seventeenth century enthusiasts were not just sending patients to Balaruc but a number of other rediscovered spas, such as Pouges near Nevers, and trumpeting their therapeutic virtues in print to win public confidence in the new remedy.[304] Supporters at this date were not limited either to those sympathetic to Paracelsian cures, for the arch-Galenist Fontaine believed that the hot baths at Digne and Aix had a useful diuretic effect in dropsy and that Aix water drunk in the morning on an empty stomach could help cure an ulcerated kidney and quartan fever.[305] By the 1630s and 1640s, with taking the waters given the royal seal of approval, only the anti-Fernelians continued to oppose the remedy. Advocated by professors and students alike, mineral-water therapy in the course of the seventeenth century came to be seen as an important weapon against a number of contumacious complaints, such as arthritis and paralysis (however caused), a potent restorative in all but especially visceral diseases, and the refuge of the barren.[306]

[301] Ibid. 9, 22.

[302] Ibid. 22–3; there is also a reference to Duchesne's anti-epileptic water, as distinct from his peony syrup.

[303] See above, Sect. D.

[304] e.g. *Les Fontenes de Pouges de Mre Raimond de Massac*, Fr. trans. by Charles de Massac (Paris, 1605); and Jean Aubéri, *Les Bains de Bourbon-Lancy et Larchambaut* (Paris, 1605).

[305] *Practica*, 363, 425, 564. Both Fontaine and his son (a physician at Marseilles) wrote against the Paracelsians: see above, n. 154. Interestingly, Fontaine describes the local waters as hot, not mineral, springs.

[306] e.g. Jacques Robethonius (Montpellier), 'An paralysi thermae sulphureae?' (1635), *quaestio*

Riverius inevitably referred to the utility of mineral water in treating many diseases, including female sterility. Women who could not conceive, he maintained, flew to sulphurous and bituminous waters 'as if to a sanctuary [*asylum*]'.[307] In particular, however, Riverius praised the use of the acidic and sulphurous waters of Balaruc as a prophylactic for those prone to nephritic diseases.[308] He had learnt their virtue, he claimed, from his own Montpellier professor, Varandaeus (Jean Colliot de Varanda, 1563–1617). The value of Balaruc and other similar waters for congenital nephritics was twofold. '[T]hey not only dissolve the mucilagineous and tartarous matter from which the stone is created, and expel the granules, but also correct the hot intemperate quality of the liver and kidneys.' The only danger was that bathing in sulphurous water might destroy native heat, a danger which could be met by drinking lemon juice (*aqua limonum*).[309]

In the proper choice and deployment of drugs lay the patient's salvation in all but the most minor diseases. Conversely, if a patient failed to respond to repeated purges, the critical days proved false dawns, and the peccant humour refused to lift, then there was little in the professors' eyes that could now be done. There was only one further course of action that might be tried in certain diseases: surgical intervention. The most simple form of surgical operation was cauterization (the application to the body of a heated iron), a remedy that served both as a stimulant and an astringent and hence could be used in many diseases where pharmacy had failed to lift the peccant humour. Other more complex operations that the physician was taught he might countenance were specific to particular maladies. These included trepanning in epilepsy (where the problem was thought to be caused by caries of the skull), paracentesis (puncturing the belly) in dropsy, lithotomy (where a stone had formed in the bladder or

medica, no. 3, in BL 1185 f 2, no. 9; Charles Drelincourt (Montpellier), 'An arthritidi thermae?' (1655), in AD Calvados 1D 991, no. 78, *quaestio medica*, no. 1 (Drelincourt, 1633–97, was later a Leiden professor); an anonymous Paris thesis of 1633: BFMP TMP in fo., v, no. 790b (a reply to an attack on drinking mineral waters in a dissertation by Jean Pietre [no. 790a], 'An visceribus nutritis aestuantibus metallicorum aquarum potus?'); Armand-Jean de Meuvillain (Paris), 'An aegre convalescentibus aquae Forgiensis?', in TMP in fo., vi, no. 975; Toussain Foucault (Paris), 'An aquae San Regiensis uteri fluori/Forgiensis sterilitati' (1648), title noted in Baron, *Quaestionum Medicarum ... series*, 39. In the second half of the 17th cent. mineral-water therapy spawned a vast propaganda literature in favour of particular spas: a number of these works are examined in Brockliss, 'Development of the Spa', *passim*. For a further brief discussion of mineral-water therapy, see below, Ch. 9, Sect. B.

[307] *Praxis medica*, 286. Sterility was thought to be a peculiarly female disease. Riverius believed that mineral water was efficacious in dropsy where there was a hot cause, and cited the cures performed at Spa (p. 207).

[308] Varandaeus was only one of several professors promoting the use of mineral water in nephritic cases at the turn of the seventeenth century: see La Framboisière on the benefits of Pouges water in his *Gouvernement*, 420–6.

[309] Riverius, *Praxis medica*, 230–1.

descended thereto from the kidneys), and Caesarean section (to release a live child from the body of its dead mother). In all cases, though, surgical intervention was an avenue which physicians were normally counselled only to explore *in extremis*, and not always then. For most faculty professors it was, to all intents and purposes, a non-option.[310]

This reluctance to countenance surgical intervention might seem surprising in the light of the clear advances made by surgeons in the sixteenth century.[311] However, this is to assume that new techniques were immediately recognized as a substantial improvement on existing methods by faculty physicians, which was not always the case. For instance, far into the seventeenth century, *pace* Paré, physicians continued to advocate cauterizing the amputated stump.[312] Moreover, as we shall see, irrespective of the physicians' attitude to the new surgical developments, there were very few surgeons even at the end of the seventeenth century who could actually perform complex operations. And most of these were located in Paris and one or two larger cities.[313] Physicians, then, were understandably reluctant to recommend major surgery.

In addition, even a skilful surgeon did not guarantee success. There seemed no point, then, in putting a dying patient through the agony of an operation whose consequences were frequently fatal.[314] In discussing dropsy, Riverius saw the problem as one of chicken and egg. Paracentesis was a perfectly plausible way of evacuating the water or air trapped in the belly, but it could only be performed safely if the patient was strong. This, though, was never possible because 'the sick and their relatives will not permit this operation until the disease has taken a deep hold, by which time the viscera are so corrupted that there can be no hope of a safe outcome'.[315]

The only contemporary operation that most members of the medical establishment agreed could be performed successfully was lithotomy, provided the patient was in the hands of a skilful and experienced operative. Even in this case,

[310] Sometimes the possibility of surgical intervention was not even mentioned. e.g. the dissertation on the stone sustained at Caen in 1638 by Johannes Georgius Albinus of Pomerania, 'An qui tenue, iis qui crassius mingunt calculo magis sint obnoxii?': see AD Calvados 1D 991, no. 74.

[311] See above, Sect. B.

[312] The Paris physician Gourmelin had anonymously attacked Paré's method in his *Réplique à une apologie sous le nom d'Ambroise Paré* (Paris, 1575), and his critique must have been felt still to have some substance in the mid-17th cent. for the tract was reprinted in *Les Œuvres chirurgicales de feu Monsieur Gourmelin* (Paris, 1647), pt. 3. In 1617 the Scot George Scharpius (d. 1638) supported cauterizing the stump in a dissertation sustained as part of a competition for a vacant chair at Montpellier: see 'An post factam amputationem partium gangraena infectarum, cauterium actuale admoveri debeat?', in BN T31–265, pp. 7–9.

[313] See below, Ch. 3, Sect. D.

[314] In 1659 a Montpellier student, putatively Sir Thomas Burnet, sustained the position that it was better to die than suffer amputation (BL 1185 f 3, no. 3, p. 30).

[315] *Praxis medica*, 205. Patients usually died the third day after the operation.

though, enthusiasm for the operation was generally muted. It was only at Paris in the first half of the seventeenth century that recourse to lithotomy was positively endorsed. Significantly, students who did so in their dissertations argued that not only was the operation safe, but it was also unavoidable, for lithontriptics seldom worked.[316] This, though, was an uncommon viewpoint, and one that suggests an anti-Fernelian allegiance. Arguably, those who discountenanced polypharmacy, on the grounds that many concoctions were lethal or useless, saw a recourse to some forms of major surgery as the lesser of two evils.[317]

H. Medical Training as Theory

The course of medicine taught in the French faculties of the sixteenth and the first three quarters of the seventeenth centuries was philosophically homogeneous. Despite the important changes that began to occur from the mid-seventeenth century in the way physiological change was understood, as late as the 1680s the fundamental underpinning of the medical curriculum remained Aristotelo-Galenism. Throughout the era of the Renaissance and the Scientific Revolution faculty Galenism had proved a highly adaptive theoretical animal, able to absorb important aspects of the rival medical theories developed by Paracelsus, Harvey, and the iatrochemists without losing its distinctive character. The principal internal influence on the development of French Galenism in this period was Fernel. The importance of the Paris professor was twofold. In the first place, he provided future generations with a personalized synopsis of ancient medical thought divided into the sub-sciences of physiology, pathology, and therapeutics. Secondly, through his conception of the major role played by occult or hidden causes in the gestation of disease and its cure, he left to his successors an extremely plastic intellectual resource.

The course of medicine given in a French faculty in the sixteenth and seventeenth centuries, it must be emphasized, was a course in theoretical medicine. According to the regulations laid down in the different faculty statutes the course students were expected to follow before taking their first or bachelor's degree varied between two and four years.[318] Whatever the length, however, the lion's share of the curriculum was taken up by the study of theoretical medicine

[316] e.g. François Ellain, 'An a tribus externa?' (1600); Antoine Roussel, 'An renum calculo *nephrotomia* (Greek)?' (1602); Pierre Le Mercier, 'An ad extrahandum calculum dissecenda ad pubem vesica?' (1635); Pierre Bourdelot, 'An calculo in rene aut vesica aliquo liquore solvi potest?' (1640): BMP TMP in fo., ii, nos. 307, 329; v, no. 821; vi, no. 880.

[317] At least one anti-Fernelian, Jean Riolan the Younger, subjected his own body to lithotomy—on two occasions in 1641 and 1642 (the first time the stone splintered): see Patin, *Lettres*, i. 455: Patin to Spon, 18 June 1649.

[318] Paris demanded four; Montpellier three: see *Réformation de l'université de Paris* (Paris, 1601), 59; Germain, *École de Montpellier*, 24 (statutes 1534, repeated 1634).

in the form of *ex cathedra* professorial lectures. Admittedly, from the beginning of the sixteenth century the curriculum was gradually enlivened with the introduction of courses in anatomy, botany, surgery, and pharmacy, where medical students (and in the last two cases usually apprentice surgeons and apothecaries, too) were instructed in the principles of these ancillary medical disciplines by visual demonstrations. But the significance of the development is not to be exaggerated. Not only did instruction in these disciplines only take up a small part of the student's time, but the courses were often irregularly given (in the smaller faculties) and delivered in dilapidated surroundings (except at Montpellier). More importantly, even if most medical students in the seventeenth century were receiving instruction in the practical medical sciences, they were certainly not being officially introduced to the sick. The new course in medical practice, it must be stressed, was completely theoretical. Even if professors discussed *en passant* particular cases or epidemics with which they themselves had been involved, they never illustrated their lectures with reference to actual patients seen by the class. This was not a course in clinical medicine *avant la lettre*.

If a medical student wished to gain a hands-on knowledge of medical practice during his medical course, then he had to attach himself to a practising physician in the town (perhaps a professor, perhaps not) and become a pseudo-apprentice. How common this strategy was is impossible to say. According to one source it was commonplace at Montpellier in the mid-seventeenth century for students to accompany their masters when they paid their house-calls,[319] but elsewhere it seems likely that this was a strategy only open to those with good family contacts who could place their son in a physician's household for the duration of his studies. Few Paris students, for instance, could have had the good fortune of the Lyons physician Noël Falconnet (1644–1734), who was able to board with his father's friend and correspondent Gui Patin.[320] Other students may have paid a fee to follow hospital doctors round the wards. Again, though, it is doubtful whether many availed themselves of the opportunity, given that the number of hospital physicians (as opposed to surgeons), even in faculty towns, as we will see, was always small before the late seventeenth century.[321]

Most physicians seem to have gained their first acquaintance with patients after they had graduated as bachelors and before they took their doctorate. At the turn of the seventeenth century the small towns around Montpellier played

[319] [Courtaud], *Seconde Apologie*, 47.

[320] R. Fauvelle, *Les Étudiants en médecine sous le Grand-Roi* (Paris, 1899), 275–8. His father was André: see above, n. 193. Presumably, if a family had no contacts with a physician's family, then boarding with an apothecary was just as good. Thomas Platter of Basle placed his two sons Felix and Thomas jun. with the Montpellier apothecary family of Catalan (sometimes Catelan): see F. Platter, *Beloved Son Felix*, 44 ff.; T. Platter, *Journal of a Younger Brother*, 49 ff.

[321] See below, Ch. 4, Sect. C.

host to a bevy of unsupervised bachelors learning the art of medical practice by filling 'their first graveyard', to cite Thomas Platter, who spent the eighteen months between his baccalaureate and doctorate at Uzès, a town of some 2,000 inhabitants.[322] Even when faculties expected their doctors to have gained some practical knowledge of patient care, as was the case at Montpellier if the graduate physician wished to practise in the town,[323] they made no attempt to organize official teaching. The only faculty which provided even minimal practical tuition in the period was Paris, where from 1639 bachelors were expected to attend the Faculty's newly founded weekly out-patient clinic.[324]

What determined the domination of theoretical medicine in the faculty curriculum was the late medieval and early modern concept of professional worth. Social status in the third estate was determined by learning rather than skill. What brought a physician social respect and gave him a sense of his own value was not primarily his ability to cure the sick, but his ability to understand sickness. In the case of the faculty physician, moreover, his credentials as a learned practitioner were all the more socially precious in that his practical skills as a healer were neither unique nor necessarily superior to those of his competitors. As will become clear in Chapters 3 and 4, graduate physicians were only a small minority among medical practitioners in sixteenth- and seventeenth-century France. Outside the large towns most practising physicians were drawn from the ranks of the apothecaries and surgeons, or from the host of empirical healers, some of whom might be licensed by the crown but most of whom held no qualification at all.

Graduate physicians, furthermore, needed to be formidably learned to merit their social position, for Galenism (albeit in a simplified form) was a public discourse in a society where medical textbooks were readily available in the vernacular and patients were expected to diagnose their own ills (even by letter). In addition, graduate physicians and empirics frequently shared the same remedies, and graduate physicians often relied on cures whose justification was solely empirically founded. As a result, it was the physician's prudence, his qualities of character, and his learning—notably his ability to expatiate on health and disease in a foreign, Latin tongue and to draw on the written record of two thousand years of medical wisdom—which set him apart. Understandably, then,

[322] *Journal of a Younger Brother*, 132–77 and 208–9. Uzès at this date was a town of 500 houses and had eight pharmacists and three barbers but no resident physician.

[323] Germain, *École de Médecine*, 48–50. From 1634 prospective resident physicians had to have spent six months in the field before taking their doctorate. From the same date all bachelors and licentiates in the town were supposed to tour the local hospitals twice monthly.

[324] L. W. B. Brockliss, 'The University of Paris in the Sixteenth and Seventeenth Centuries', Ph.D. diss., Cambridge, 1976, pp. 210–11. In 1622 the Paris Faculty had suggested that bachelors should accompany doctors on their rounds but this was not made compulsory (ibid.). The faculty's clinic was set up as a rival to the one run by Renaudot: see below, Ch. 5, Sect. E.

theoretical medicine was given pride of place in the curriculum, for the knowledge of theory gave the graduate physician his identity. Not surprisingly, too, graduate physicians always emphasized this point of differentiation whenever they gave public utterance to the distinction between the legitimate and illegitimate medical practitioner, be it in intemperate pamphlets against the dangers of empirics to public well-being or in more sober professorial discourses.[325]

This rhetorical emphasis on legitimization from learning was all the more strident in that the graduate physician did not necessarily have a monopoly position in law. As Chapter 3 makes clear, the sixteenth and the first part of the seventeenth centuries saw the emergence of a powerful, legally recognized, corporative medical community, headed by graduate physicians. Nevertheless, this corporative community had a limited reach and was only fully articulated in the largest towns. Ostensibly, many graduate physicians only had the talisman of their learning to protect them against the winds of unlicensed competition. As will be shown in Chapter 5, their position was never as dire as their apologists pretended, for, notwithstanding the competition, they generally monopolized medical practice among the élite. The fact they did this, however, reflected their learning, and the social power that learning in early modern society enjoyed.

[325] Physicians published works in the vernacular denouncing the plague of empirics on several occasions in the period. A number are discussed below, Ch. 4, Sect. A.

3

The Corporative Medical Community in the Sixteenth and Seventeenth Centuries

A. The Origins of Medical Corporatism

Prior to the middle of the twelfth century, practitioners of medicine in France formed an inchoate, undifferentiated group of healers, men and women, religious and lay, all differing widely in their commitment to and knowledge of the healing arts. From the 1130s, however, the anxiety of the post-Gregorian Church to create a more dignified and exemplary clergy had led to attempts to regulate clerical medical practice. In a series of conciliar rulings, churchmen were enjoined to practise only if they were medically competent, kept up with medical knowledge (a reference to the contemporary recovery of the classical inheritance), and consulted colleagues. They were also not to harm patients through negligence, or experiments. Above all, at the Lateran Council of 1215 clergy in major orders were forbidden from cauterizing or letting blood. At roughly the same time, an attempt was made to stop monks and beneficed clergy from leaving their cloister or cure of souls to study at the newly established medical schools of Italy and France, although the blanket restrictions of 1163 and 1219 were lifted from 1298.[1]

The Church did little to control medical practice *tout court* beyond insisting at the Council of 1215 that all practitioners were to ensure that a sick person had received confession before beginning treatment, and exhorting physicians to charge a fee in relation to the patient's circumstances. Admittedly, in the particular case of Paris, the Church blessed the right of Faculty physicians to a monopoly of practice as early as 1220, but the power of enforcing that privilege was, significantly, eventually lost to the crown. If in the early fourteenth century cases concerning interlopers were tried in the bishop's court, from 1353 by an edict of the French king, John I, breaches in the Faculty's monopoly became a

[1] D. W. Amundsen, 'Medieval Canon Law on Medical and Surgical Practice by the Clergy', *Bulletin of the History of Medicine*, 52 (1978), 39–56; R. L. Numbers and D. W. Amundsen (eds.), *Caring and Curing: Health and Medicine in the Western Religious Tradition* (New York, 1986); N. G. Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (London, 1990), 43–4.

matter to be judged by the king's representative in Paris.[2] By this crucial ruling, it became established that right to grant a monopoly in the practice of physic belonged to the state rather than the Church. Although the Paris Faculty remained an ecclesiastical institution whose statutes were granted by the pope and whose graduates received the licence from the bishop or his representative, it was henceforth recognized as an autonomous, self-governing corporation whose privileges were protected by the king through the royal courts.[3]

The Church's attempt to police clerical medicine was also of limited importance in the emergence of a differentiated medical community. The fact that most faculty graduates in the thirteenth century were clerics in major orders and consequently forbidden to practise surgery, may well have acted as a catalyst in the appearance of the consultant-physician. However, this development, it will be recalled, was due primarily to contemporary conceptions of dignity. The graduate physician was a man of science who did not want to forfeit the respect due his learning by indulging in manual labour. As a result, the phenomenon of the consultant-physician long outlasted the demise of the ecclesiastic-consultant. Indeed, the proportion of medical graduates who were also clergymen was on the wane even before the character of the consultant-physician had been fully formed. It was only in 1350 that Parisian medical students were finally banned from practising surgery, and it was the turn of the fifteenth century before a strict separation between physic and surgery was effected at Montpellier.[4] Yet, the laicization of the faculties can be traced from the mid-fourteenth century. While one-quarter of physicians practising between 1350 and 1399 held ecclesiastical benefices, the figure was down to one in fourteen by the late fifteenth century—and less than half this number had taken major orders. Moreover, from the mid-fifteenth century Paris medical graduates were specifically permitted to marry by the statutes.[5] The sixteenth century saw the continuation of this downward trend, although the phenomenon of the ecclesiastic-consultant did not disappear completely. The great medical humanist Rabelais moonlighted, after all, as the *curé* of Meudon, while one of the great gout physicians of the first part of Louis XIV's reign was the Paris doctor and abbé Pierre Bourdelot.[6]

The graduate physicians' need from the thirteenth century for subordinates to carry out their orders was met in one of two ways. Either a group of medical

[2] P. Kibre, 'The Faculty of Medicine at Paris, Charlatanism, and Unlicensed Medical Practices in the Later Middle Ages', *Bulletin of the History of Medicine*, 27 (1953), 16–19.

[3] French universities had no power to pursue those who broke their privileges independently.

[4] See above Ch. 2, Sect. A.

[5] D. Jacquart, *Le Milieu médical en France du XIIe au XVe siècle* (Geneva, 1981), 279 ff.; *Commentaires de la faculté de médecine de l'université de Paris (1395–1516)*, ed. E. Wickersheimer (Paris, 1905), p. xlvii (statutes of 1452).

[6] Bourdelot, a Paris doctor in 1642, is also remembered as the host of a private Parisian scientific circle in the mid-17th cent.

practitioners evolved as specialist surgeons, or, more commonly, artisan-craftsmen in related occupations offered, or were invited to offer, their services. Thus surgical practitioners were usually barbers by trade, and apothecaries spicers, thereby inevitably giving pharmacy a higher status than surgery: barbering was a demeaning body-service, while a spicer, engaged in long-distance trade, was more a merchant than a menial. Over time these surgeons, barber-surgeons, and spicer-apothecaries began to organize themselves into specific communities, and, where the existence of these communities had been recognized by the local ruler, they gained a corporate identity (like the Paris and Montpellier faculties) and enjoyed the monopoly right to practise their art in the locality.[7]

In organizing themselves into communities, surgeons, barber-surgeons, and spicer-apothecaries were merely copying developments which were occurring in other trades. Though we know little about these trade organizations until the late fourteenth century, it would appear that guilds had gradually been established in many French towns under the control of the king of France from early in the twelfth century. This was part of a more general process by which French public law, increasingly emancipated from its earlier seigneurial and ecclesiastical moorings, developed by imposing a corporative framework on society at large. France became a 'society of orders' (a *Ständestaat*), characterized by three juridical orders: the clergy, the nobility, and the third estate. But this tripartite division was itself honeycombed by the emergence of a myriad additional groupings: some territorial (provinces, cities, and so on), some institutional (universities, cathedral chapters, monasteries, legal officials, and so on), some economic (guilds most notably). By acquiring local authorizations and, in particular, royal letters patent, such bodies gained a legal personality.[8]

From the point of view of the beneficiaries, the king's incorporation of communities of surgeons, barber-surgeons, and spicer-apothecaries had similar motivations to the pope's original incorporation of the medical faculties. Their incorporation as a guild protected their self-interest, established self-government, and strengthened their public identity. The interpenetration of the public and the private lay at the heart of corporative existence. Legal identity served the private interest of members in that the corporative grouping was given a legal monopoly of provision of services, locally at least, a means of policing its own recruitment procedures, and a conduit for the transmission of

[7] It must be stressed that in all cases virtually nothing is known about the emergence of these subordinate practitioners until they formed a community.

[8] E. Lousse, *La Société d'Ancien Régime: Organisation et représentation corporatives* (Louvain, 1952); F. Olivier-Martin, *L'Organisation corporative de la France d'Ancien Régime* (Paris, 1938). See also F. Olivier-Martin, *L'Absolutisme français* (Paris, 1988 edn.); E. Coornaert, *Les Corporations en France avant 1789* (2nd edn., Paris, 1968); and R. Mousnier, *The Institutions of France under the Absolute Monarchy, 1598–1789*, Eng. trans. (London, 1979), esp. ch. 10.

trade mysteries. This allowed members to engage fully and freely in their vocation within the wider community. They were enjoined to live in peace and tranquillity together, and the corporative body provided a forum in which everyday commercial disputes and personal rivalries could be appeased. Royal statutes often extended a number of local civic privileges to boot: exemptions from certain taxes, for example, and military exemptions. Legal personality meant that a community of surgeons, say, could hold funds in their collective name, deriving from admissions fees and occasionally property, plead in court, and even provide alms for needy colleagues.

In the crown's case, the foundation of these legal medical communities sprang from the same inspiration as the 1353 edict establishing monarchical control over the Paris Faculty: an incipient desire to make the regulation of medical practice a state affair. There was a strong protectionist element at play in the foundation of guilds, but to some degree it was balanced by acceptance that superior authorities, most notably the central government, retained a legitimate concern with the public interest. The 'common good' was served by this mechanism for the quality control of the provision of commodities and services: yet if privileged corporations of any kind were found to be performing their tasks in ways which did not chime with what the ruler adjudged to be public welfare, then the superior authority was within its rights to intervene. There was a degree of negotiation, then, implicit in the corporative model, and for their part these bodies were over time generally looking to secure better privileges and exemptions.[9]

This public, civic identity was emblematized in ceremony and ritual. Many guilds had linked confraternities, which played a role in the associational and sociabilizing aspects of corporative life. Corporative bodies had their own seals, their own insignia and banners, and marched in city processions in their allotted place. An ascending order of civic precedence and priority slowly evolved as the corporative processes unfolded. The development of the corporative network went in tandem with an increasing acceptance of social and juridical hierarchy. This was an additional reason why learned physicians were likely to support moves for the incorporation of their medical subordinates. The statutes of the latter laid down their duties as well as their rights, and offered some assurance that surgeons and apothecaries would stick to their last.[10]

Of the nascent medical guilds, the Montpellier and Paris surgeons displayed the most precocious organization. As early as 1252 the Montpellier barber-

[9] A good introductory account of the civil-law theory of guild organization is A. Black, *Guilds and Civil Society in European Political Thought from the Twelfth Century to the Present* (London, 1984).

[10] As early as 1271 the Paris Faculty was attacking surgeons, apothecaries, and herb-sellers for going beyond the limits of their art: see *Commentaires*, ed. Wickersheimer, p. lxxvii.

surgeons had established a legally recognized closed shop,[11] while in 1311 a group of specialist surgeons in the capital, who had formed themselves into the confraternity of Saints-Côme and -Damien (usually called Saint-Côme) in 1268, were granted the exclusive right to practise in Paris. Unlike the Paris graduate-physicians, however, the monopoly of the surgeons of Saint-Côme was short-lived, for in 1372 the crown also permitted the Paris barbers to perform minor operations.[12] As a result, Paris, uniquely, came to have two companies of surgeons, and the royal declaration initiated a quarrel between the two communities which lasted until the mid-seventeenth century.[13]

This process of internal differentiation within the burgeoning official medical community was not just functional. The learned physicians of Paris and Montpellier gained their knowledge of the art of physic through formal classroom tuition. Moreover, entrance to the portals of the faculty required a speaking knowledge of Latin and a prior training in philosophy. The physician's knowledge was encapsulated in the words of the ancients, a fact symbolized in the doctoral *acte* by the gift of a book.[14] Surgeons and apothecaries, however, were trained, like other artisans, as apprentices. In the main, therefore, they lacked the exposure to the textual learning required by the physician, a distinction that served only to emphasize their subordinate position. Where guilds of surgeons and apothecaries existed, everything was done to ensure that the masters had received a common grounding in their art through a formal system of examination. Sometimes, to assist a common standard of entry, there were even statutory restrictions on the number of masters allowed to take apprentices. At Montpellier, for instance, from 1418 this right was limited to the officials of the barber-surgeons' guild, the four *maîtres chirurgiens jurés*.[15] None the less, however formalized the system of recruitment became, it remained the case that surgeons and apothecaries were given a practical education, physicians a theoretical one. They thus gained a craftsman's mastership at the end of their training, not

[11] L. Dulieu, *La Chirurgie à Montpellier de ses origines au début du XIXe siècle* (Avignon, 1975), 17–19. This was a real closed-shop for the number of barber-surgeons' *boutiques* was limited. D. Jacquart, *Milieu médical*, 265, gives the date of the first Montpellier statutes as 1242.

[12] E. Wickersheimer, *La Médecine et les médecins en France à l'époque de la Renaissance* (Paris, 1906), 131–2; Olivier-Martin, *Organisation corporative*, 381. François Quesnay, *Recherches critiques et historiques sur l'origine, sur les divers états et sur le progrès de la chirurgie en France* (Paris, 1744), 29–55, claims that a community of Paris surgeons goes back to 1033 and the company's first statutes were promulgated in 1260. But this is an unreliable source, deliberately written to advance the cause of the Paris surgeons in their quarrel with the Paris Faculty in the second quarter of the 18th cent.: this quarrel is discussed below, Ch. 9, Sect. D.

[13] See below, Sect. E.

[14] This symbol of investiture that doctors of physic continued to receive on graduation in the 16th and 17th cents. is discussed in Nicolas Abraham, sieur de La Framboisière, *Le Gouvernement nécessaire à chacun pour vivre longuement en santé* (2nd edn., Paris, 1601), 7.

[15] Dulieu, *Chirurgie*, 25.

a doctoral degree. The Paris surgeons of Saint-Côme alone, supposedly from 1379, attempted to graduate candidates for the mastership in the fashion of the faculties, raising supplicants for admission to the company first to the baccalaureate and then to the licence.[16] The subordinate position of the surgeons and apothecaries was also emphasized by their dress. Physicians wore a long gown, surgeons and apothecaries a short cape. Physicians also sported a mortarboard and gloves.[17]

Moves towards the incorporation and hierarchization of medical practice also involved a confirmation and further reduction of the low status of women practising medicine. The ecclesiastical character of the universities denied, and would continue to deny until the mid-nineteenth century, women any chance of training as learned physicians, and the same pressures also acted to exclude male members of the Jewish and Muslim communities in France. The communities of barber-surgeons and apothecaries were similarly predominantly male preserves, even if there was no formal prohibition of women members by the statutes and most companies developed the practice of permitting widows to continue their ex-husband's trade. As a result, women made up only 1.5 per cent of the total number of French medical practitioners identified over the entire period from 1100 to 1500, and a third of these appear to have been midwives.[18] Although this statistic is almost certainly a gross underestimate of the number of women actually practising physic in the late Middle Ages, it does emphasize how few had a high profile. Those who did, like the Paris healer Jacoba Félicie de Almania, who was important enough to be denounced by the Faculty in 1322 for her temerity in treating both male and female clients, were exceptional.[19] And the position of women practitioners grew more precarious after 1500. Increasingly, as we shall see, female healers were caught in the corporative crossfire between physicians and surgeons on the one hand, and the official medical community and unlicensed practitioners on the other.[20]

We should not, however, exaggerate the coherence, size, and authority of the corporative medical community in the late fifteenth century. In the first place, the internal differentiation between the physicians and their subordinates was not complete. Even in the fifteenth century there were learned physicians who had learnt their art not in the schools but as apprentices to other physicians.

[16] D. Jacquart, *Milieu médical*, 80. The surgeons of Saint-Côme were thus ambiguously placed in the hierarchy of the official medical community. They had pretensions to a higher status, as became clear in the 16th cent.: see below, Sect. E.

[17] Gloves were a mark of social superiority; doctorands gave a pair to each of the doctors present at their graduation.

[18] M. Green, 'Women's Medical Practice and Medical Care in Medieval Europe', *Signs*, 14 (1989), 434–73; D. Jacquart, *Milieu médical*, 47–53. For midwives, see below, Ch. 4, Sect. E.

[19] Kibre, 'Faculty of Medicine at Paris', 8–12.

[20] See below, Ch. 4, Sect. E, *passim*.

This was particularly true of the coterie of Jewish physicians that still existed in southern France and formed 5.1 per cent of the learned physicians known to have practised in the kingdom in the period 1450–99.[21] Secondly, trained medical practitioners were present in significant numbers only in the largest French towns, such as Paris, Montpellier, Lyons, Toulouse, Rouen, and Marseilles. The best-served was probably the last. With only 10,000 inhabitants in the mid-fifteenth century, it boasted 24 physicians, 3 specialist surgeons,[22] and 21 barbers, a ratio of 4.8 trained practitioners to 1,000 inhabitants. But Marseilles was a town with a prominent contingent of Jewish doctors.[23]

Finally, and most importantly, even where trained practitioners existed in reasonable numbers, they were not always gathered in a corporation or legally recognized community. This was significant, for it was only where trained practitioners were incorporated by the ruler that they had a medical monopoly which was legally enforceable, at least in theory. Learned physicians were in the weakest position. Although graduate physicians in the faculty towns of Paris and Montpellier had gained a monopoly of medical practice in the late thirteenth century, faculty graduates who practised in other cities at the end of the fifteenth century seldom had similar legal protection. It can be presumed that graduate physicians in the three other university towns where there were degree-giving faculties by 1500—Toulouse, Avignon, and Caen—had acquired a monopoly right, even if there is no definite evidence for this. Elsewhere, however, graduate physicians only seem to have enjoyed this privilege at Nîmes and Bordeaux (where the establishment of closed colleges of physicians had been given legal warranty in 1397 and 1411).[24] There were far more corporations of barber-surgeons and spicer-apothecaries by 1500, but even in the largest cities the position of the physicians' subordinates was not always secure. At Paris the apothecaries formed a separate legal community, albeit still united to the spicers, from 1353.[25] At Lyons and Montpellier, in contrast, the apothecaries

[21] D. Jacquart, *Milieu médical*, 83–7, 160–7, 280. In the period 1350–99 they formed 11.5% of the total. Jewish physicians received a licence to practice from a royal or papal official, after having been examined by a mixed Jewish–Christian jury. In the 14th cent. there were female Jewish physicians at Marseilles. In the 16th cent. Jewish physicians all but disappear from France, but several Montpellier medical practitioners who converted to Protestantism could trace their ancestry back to Jewish immigrant families who had converted to Christianity.

[22] Marseilles seems to have been one of the few towns, apart from Paris, where there were artisans exclusively practising surgery in the 15th cent.

[23] D. Jacquart, *Milieu médical*, 253. The ratio would have been even more favourable had the number of apothecaries been known. For figures for Paris, Montpellier, and Toulouse, see ibid., pt. iii, ch. 1.

[24] Isambert, vi. 781; G. Pery, *Histoire de la faculté de médecine de Bordeaux et de l'enseignement médical dans cette ville 1441–1888* (Bordeaux, 1888), 6–8. The term 'college' further differentiated physicians from their subordinates, who were gathered into 'communities'. At Bordeaux the college of physicians was founded before the university, which dates from 1441.

[25] Olivier-Martin, *Organisation corporative*, 397.

were not members of any corporate body. At Montpellier they merely belonged to a confraternity of spicer-apothecaries, a self-help, quasi-religious organization that could police its own members but had no power over interlopers.[26]

The low level of incorporation reflected the slow pace of trade incorporation generally in France, especially in the south. Although guilds and confraternities had spread rapidly from the twelfth century, the crown had been wary about giving their existence too-widespread legal recognition. Admittedly, a number of important towns by the mid-fifteenth century, such as Paris, were designated *ville jurée*: all trades within their walls were organized into corporations with monopoly rights. Many other large towns, however, such as Lyons, Montpellier, and Toulouse, were *villes libres*, where anyone was free to set himself up in all but a handful of trades. Lyons, for instance, had its status confirmed by Louis XII at the turn of the sixteenth century. Only the goldsmiths, locksmiths, and barbers were specified as incorporated trades.[27] The establishment of a nationwide corporative medical network was destined to be a protracted business.

B. Incorporation in the Sixteenth and Seventeenth Centuries

In the century that followed the end of the Hundred Years War in 1453, there was little change to the map of incorporation. No new college of physicians was founded and there were no significant additions to the number of corporations of barber-surgeons and spicer-apothecaries. The only major development of note in medical organization was the royal endowment of four permanent chairs in medicine at Montpellier in 1498. This measure changed a situation in which the Faculty had comprised the doctors practising in the city, each of whom (as at Paris) took turns at lecturing. Thereafter, the Montpellier Faculty was gradually transformed into a small, professorial organization, eventually (by 1610) comprising eight members (six professors and two adjutants), which held itself distinct from the much larger group of Montpellier graduates who ministered to the town. The Faculty and the College of Physicians thus became separate entities.[28]

[26] L. Dulieu, *La Pharmacie à Montpellier de ses origines à nos jours* (Avignon, 1973), 13–43. Admittedly, by a royal edict of 1399 no one could practise pharmacy, surgery, or physic at Montpellier who had not been examined, but this was a vague pronouncement which did not explain what being examined meant. It did not prevent trained and examined master apothecaries from other towns moving to the city to practise their art as they wished. Referred to in Dulieu, *Chirurgie*, 23.

[27] Olivier-Martin, *Organisation corporative*, 94–9.

[28] The development was finalized in 1534. According to the 1534 statutes, ordinary doctors could still lecture, but only after Easter: see A. Germain, *L'École de médecine de Montpellier: Ses origines, sa constitution, son enseignement* (Montpellier, 1880), 23–33, 76–8; L. Dulieu, *La Médecine à Montpellier*, ii. *La Renaissance* (Avignon, 1979), 17–23. The change continued to be disputed by the ordinary doctors until the early 17th cent.

The stagnation in the move towards incorporation in the period 1450 to 1550 may have reflected the buoyancy in demand for medical services. In what was a period of rapid urbanization as the population recovered from the ravages of plague and war, it may well have been that the public's health-care requirements were growing, thus providing trained medical practitioners with sufficient clients to keep them happy with the status quo. The slow pace of incorporation in these years, however, also owed much to the crown. Always chary of establishing trade corporations willy-nilly, the crown's attitude to further incorporation from the late fifteenth century seems to have become positively, if only temporarily, glacial. Confraternities associated with guilds were a particular cause of royal ire. At a time when the state was putting pressure on towns and cities to render local government more docile, more oligarchic, and less democratic, the fraternal ribaldry of such confraternities seemed to make them a cradle of subversion. By the royal ordinance of Villers-Cotterêts in 1539, an attempt was made to outlaw trade confraternities altogether.[29]

In the middle decades of the sixteenth century the pace of incorporation began to quicken a little. Not only were the existing statutes of many closed communities in the large cities revised at this time to give an independent existence to the apothecaries in particular, but entirely new corporations of barber-surgeons and spicer-apothecaries were formed in quite moderately sized towns. Typical was the exclusive community of barber-surgeons set up at Tonnerre in Burgundy in 1572 on the instigation of two surgeons at the local hospital, Didier Cospin and Berthin Combart.[30] At the same time, a number of colleges of physicians were founded in some of the most populous non-faculty towns (see Map 3*a*): Rouen (1538), Troyes (1539), Orléans (*c.*1560), Tours (1561), and most importantly Lyons (1576).

All the surviving evidence suggests that the pressure for the establishment of these new medical corporations came from within the body of trained practitioners. The evidence suggests, too, that trained medical practitioners were beginning to feel the winds of competition from unqualified healers: either health-care needs were stabilizing or the number of empirics was growing, perhaps both. The learned physicians, who petitioned the crown for monopoly rights in this period, justified their demand for incorporation on the grounds of the public good. The health of a town's inhabitants was being endangered by the presence of ignorant practitioners of physic: surgeons and apothecaries who failed to stick to their last, and a bevy of semi-trained or untrained medical

[29] Isambert, xii. 638–40 (clauses 185–91 of the ordinance). The actual intentions of the king are not clear; clause 185 outlaws confraternities, but clause 191 could be taken as referring to all guild monopolies. For the attitudes of kings in the first part of the century to corporations, see H. A. Lloyd, *The State, France and the Sixteenth Century* (London, 1983), 39 ff.

[30] Wickersheimer, *Médecine à l'époque de la Renaissance*, 160.

MAP 3*a*. Non-Faculty colleges of physicians in 1700 (with dates of foundation)

Notes: In addition to the nineteen colleges listed, there also seem to have been colleges in 1700 at Abbeville, Béziers, Dieppe, Le Mans, Montauban, Rennes, and Sens. The Bordeaux college was always separate from the faculty; professors who wished to practise in the town had to be incorporated in the college. The Montpellier college only became separate from the faculty in 1534. Grenoble was a peculiar college in that all three branches of the corporative medical community formed a single corps.

Source: based on works cited in Ch. 3 ns. 24, 28, 31–2, 53, esp. C. Coury, 'The Teaching of Medicine in France from the Beginning of the Seventeenth Century', in C. D. O'Malley (ed.), *The History of Medical Education* (Berkeley & Los Angeles, 1970), 142.

interlopers (students, itinerants, women). A college of physicians was therefore needed, it was claimed, to police the provision of medical services in order better to protect the public.

Whatever the reason for the fresh demand for incorporation from below, the crown and local authorities were still less than enthusiastic in many cases about granting the requests speedily. At Tours, for instance, if the crown accepted that unqualified practitioners were a problem as early as 1556, there was no immediate move to establish a fully fledged college. Instead, the power of supervision was given initially to a simple commission of judges and doctors, who were to examine the diplomas of practitioners of physic in the city every three years and watch over the examination of surgeons and apothecaries.[31] At Lyons, where the history of the foundation of the college is known in detail, the physicians' complaints were completely ignored for twenty-five years. A campaign for a college was launched in 1552 but the city only lent its weight to the campaign in 1574 after a plague epidemic had seen all but two of the town's surgeons deserting

[31] BN MS Fr. 18767, fos. 80–3, letters patent of Henry II, July 1556.

their post.[32] Clearly the crown and its municipal allies remained unwilling to multiply the number of medical corps, even if more sympathetic towards revising existing statutes.

It was the Wars of Religion (1561–98) above all else which turned the state from a lukewarm supporter of medical corporative bodies into the ardent apologist of the principle and practice of incorporation. The collapse of the crown's control over the towns, and the prominent role played by the artisans in the anti-monarchical, decentralist, and sectarian Catholic League,[33] encouraged the king and his advisers to look more sympathetically on the incorporation of the artisan community, as a means of reasserting royal authority in the municipalities. In December 1581 Henry III issued an edict ordering all tradesmen and artisans to obtain letters of mastership irrespective of whether or not they practised in a recognized *ville jurée*, and this edict was reissued in a modified form by Henry IV in May 1597, once he had regained control of the kingdom and brought the civil wars to a virtual end.[34]

The edict, admittedly, was never fully implemented,[35] but it did ensure that petitions for the creation of medical corporations were thereafter guaranteed a more sympathetic hearing. All that was required henceforth was a consensus among local practitioners to establish a corporation or *communauté jurée*. Significantly, the crown often made clear its belief that incorporation was the key to social peace in the preamble to the new corporation's statutes. Nothing, declared the letters patent, establishing statutes for the apothecaries of Angoulême in 1597, was 'more to be recommended in human society for its entire conservation than to cause everyone to be contained within the bounds of his duty by way of ordinances and regulatory decrees'.[36]

As the seventeenth century progressed and peace was slowly re-established through the efforts of Henry IV and the cardinal-ministers Richelieu and

[32] A. K. Lingo, 'The Rise of Medical Practitioners in Sixteenth-Century France: The Case of Lyon and Montpellier', Ph.D. diss., Univ. of California, 1980, pp. 178–84; also BN MS Fr. 18767, fos. 53–6, for the statutes of 1576.

[33] The towns within the Catholic League, officially formed in 1585, aimed to establish quasi-municipal republics. For an introd., see J. H. M. Salmon, *Society in Crisis: France in the Sixteenth Century* (London, 1975), ch. 10. The classic study is H. Drouot, *Mayenne et la Bourgogne: Études sur la Ligue, 1587–1595* (2 vols.; Paris, 1937).

[34] Isambert, xv. 135–41, for the edict of Henry IV. According to clause 2 (p. 138) of the edict all apothecaries, barbers, and surgeons practising without letters of mastership in a *ville non-jurée* were to appear before the king's representative (unspecified) within eight days of the promulgation of the edict to be examined by a committee of four masters living in the town and a graduate physician.

[35] Olivier-Martin, *Organisation corporative*, 100–11. There was widespread opposition from *villes libres*, like Lyons. In 1673 Colbert had the crown issue a further edict ordering the incorporation of all trades in a *ville jurée*.

[36] E. Sénemaud, 'Statuts des apothicaires d'Angoulême en 1597', *Bulletin de la Société archéologique et historique de la Charente*, 3rd ser. 3 (1861), 162–5, royal letters patent.

Mazarin, the crown had a further reason for supporting incorporation. From the time of Henry IV's finance minister Sully, the crown was committed to the strengthening of its fiscal base through the promotion of the prosperity of its subjects. Economic development, it was believed, was best advanced by offering a privileged monopoly position to those engaged in novel, risky, or particularly useful industrial or commercial enterprises. Known to historians as mercantilism (a word invented by Adam Smith in the late eighteenth century), this doctrine of state intervention in the economy lay behind the incorporation of overseas trading companies, the privileges accorded those introducing new industries or crops, and the development of a protectionist tariff wall round the state. In the age of Colbert, principal minister from 1661 to 1683, the stimulation of the economy by mercantilist measures was particularly championed. The incorporation of medical practitioners therefore made perfect sense in terms of the contemporary mercantilist ethos: it could not but be seen as the key to a healthy, as well as wealthy, population, and a further spur to Bourbon greatness.[37]

However, there was still another factor lying behind the crown's new-found enthusiasm for incorporation after 1600. Within the royal court, there emerged a powerful lobby with a vested interest in extending the corporative medical community, namely the principal medical officers of the royal household. Since the late Middle Ages, monarchs had salaried physicians, surgeons, barbers, and apothecaries to follow and care for their person.[38] Those who held the posts of premier physician and premier surgeon and (for a while) premier barber were in a strong position to use their influence to attempt to gain control of the corporative medical community—in much the same way as the *grand aumônier* (the monarch's premier chaplain) was in this period developing his powers over the Church throughout the kingdom. The premier barber in 1419 had been accorded control and surveillance over corporations of barber-surgeons throughout the land, and although this right does not seem to have been exercised, it provided the model to which the premier physician and the premier surgeon, the former especially, aspired.[39]

The ambitions of the premier physician were initially checkmated by the prestige and influence of the Paris Faculty, which considered itself to be at the apex of the official medical hierarchy. In 1598, however, the king's premier

[37] For French mercantilism, see esp. C. W. Cole, *Colbert and a Century of French Mercantilism* (2 vols.; New York, 1939).

[38] The development of the royal medical household is discussed below, Ch. 4, Sect. B.

[39] Wickersheimer, *Médecine à l'époque de la Renaissance*, 149. There is some confusion over the date of this privilege: Olivier-Martin, *Organisation corporative*, 382, gives 1427; D. Jacquart, *Milieu médical*, 102, says that in 1371 the king's premier barber was given control over the barbers of Paris, and in 1427 over barbers in all *bonnes villes*. The privilege did not extend to the Paris surgeons of Saint-Côme.

physician gained the right to inspect existing corporations of apothecaries and surgeons throughout the kingdom, and in the first part of the reign of Louis XIII this privilege was extended further. The then premier physician, Jean Hérouard (d. 1628), was given the power of policing the activities of all surgeons and apothecaries, and also the right of establishing corporations where these did not exist. A similar power was given to his successor, Charles Bouvard, and to the second premier physician of Louis XIV, Antoine Vallot (d. 1671),[40] while in 1636 the crown made incorporation for surgeons and apothecaries obligatory.[41] Future premier physicians, on the other hand, only retained the right of policing the apothecaries. From 1668, as a result presumably of a palace coup, the privilege of controlling the communities of barber-surgeons was given to the king's premier surgeon, François Félix de Tassy (d. 1676), who gained the right of appointing a lieutenant to guard his interests in each corps.[42] The fact that the premier physician, and later the premier surgeon, received a fee for each new master surgeon or apothecary admitted to a legally recognized community was an additional incentive working in favour of medical incorporation.

Consequently, the seventeenth century saw a considerable extension in the number of medical corps. Members of the two subordinate medical arts in quite small towns became incorporated. In Poitou, for instance, there were corporations of apothecaries only at Poitiers and Saumur before 1600 (see Map 3*b*). Over the following century new guilds were established at Niort (1605), Saint-Maixent (1613), Thouars (1617), Châtellerault (1619), Fontenay-le-Comte (1637), Bressuire (1666), and Civray (1703), and there were possibly foundations at eight other locations.[43] Many of these new guilds were definitely formed on the orders of the king's premier physician or his local representatives. Thus, the foundation at Bressuire seems to have been on the initiative of Vallot's representative, the apothecary de Meuve, author of a *Dictionnaire de Pharmacie*, who had been accorded the right to establish apothecaries' corporations throughout France.[44]

The stimulus from above to legal incorporation put additional pressure on local practitioners to join the trend. A snowball effect was operative, whereby

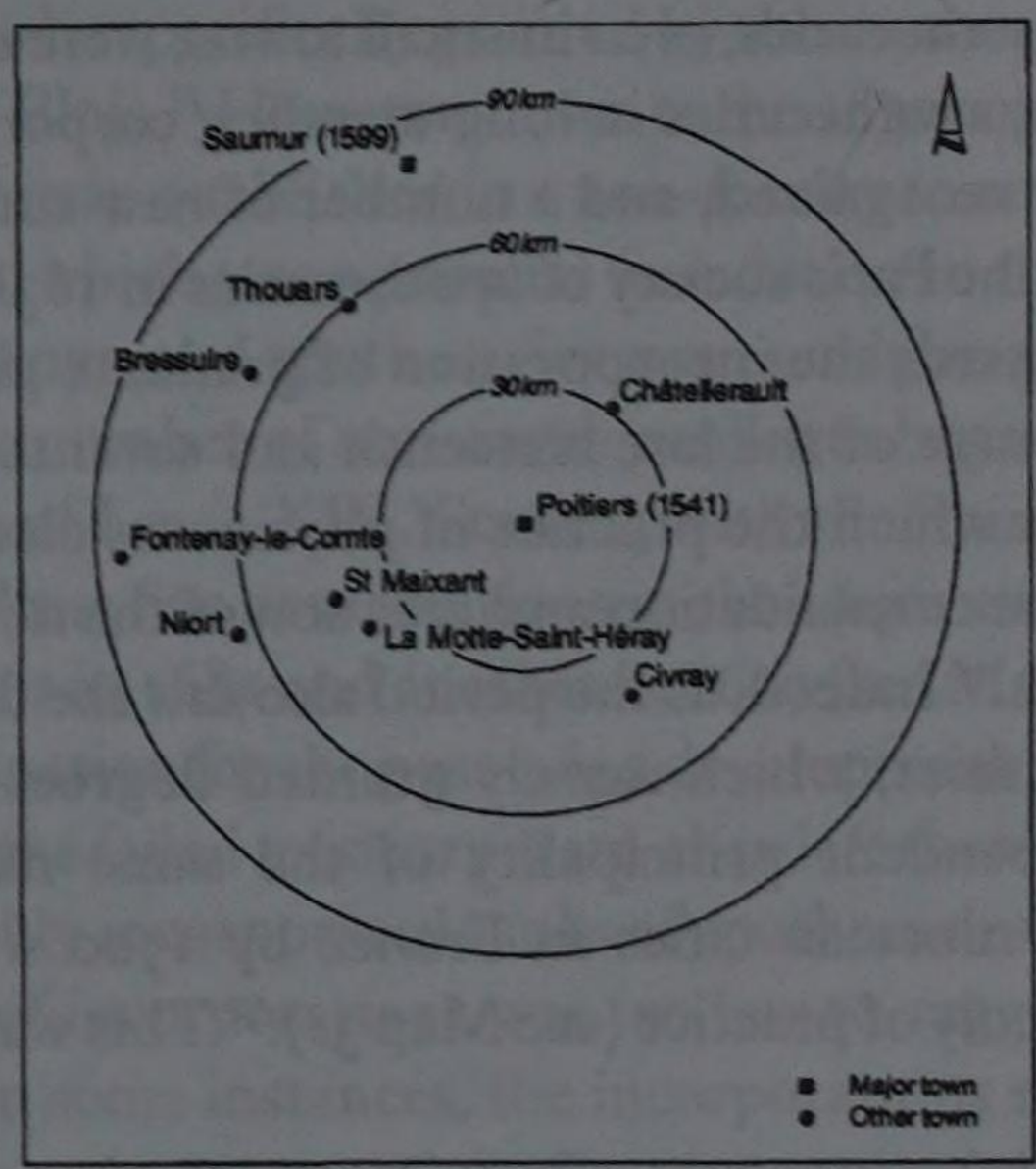
[40] Sometimes spelt Valot. He served from 1652 to 1671.

[41] See esp. P. Rambaud, *La Pharmacie en Poitou jusqu'à l'an XI* (*Bulletin et Mémoires de la Société des Antiquaires de l'Ouest*, 2nd ser. 30; Poitiers, 1906), 81–9. A number of letters patent granting these privileges exist: e.g. for Valot, BN, 8-T15-10, 8-T18-144, and 8-T18-10.

[42] T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980), 30. By this time the premier barber was attempting to exercise his long-dormant right, at least in respect to Paris: see below, Sect. E.

[43] Loudun, Montmorillon, Lusignan, Parthenay, La Mothe-Saint-Héraye, Melle, Luçon, and Les Sables d'Olonne: see Rambaud, *Pharmacie en Poitou*, 87–90. Saint-Maixent was an unusual foundation in that a single corporation was established for a number of trades, including the apothecaries and spicers.

[44] Ibid.



MAP 3*b*. Expansion in the number of apothecaries' corporations in Poitou after 1600

Source: P. Rambaud, *La Pharmacie en Poitou jusqu'à l'an XI* (*Bulletin et Mémoires de la Société des Antiquaires de l'Ouest*, 2nd ser. 30; Poitiers, 1906), ch. 4, and *pièces justicatives* xi and xii.

local practitioners sought to secure corporative status so as not to seem legally unprotected in a world in which incorporation was becoming the norm. The corporation of apothecaries which was founded in 1653 at Pontoise, for example, seems to have been the result of a petition by a group of pharmacists to the local *lieutenant-civil* (the royal representative attached to the municipality) that they be given monopoly rights.[45]

Grass-roots pressure for incorporation included requests from existing corporate groups that their membership should be more clearly and tightly defined, or that they be allowed to police the profession of their art over a wider geographical area, usually the jurisdiction of a local royal court.[46] This pressure was particularly apparent among apothecaries, with the result that this period was to prove immensely significant in the development of a distinctive pharmaceutical trade, completely detached from its spicer origins. Although barbers and surgeons continued to be closely associated during this period—indeed, in 1655 the independent Paris community of Saint-Côme was to be amalgamated with the company of barber-surgeons—this was no longer true of apothecaries and spicers.[47] The

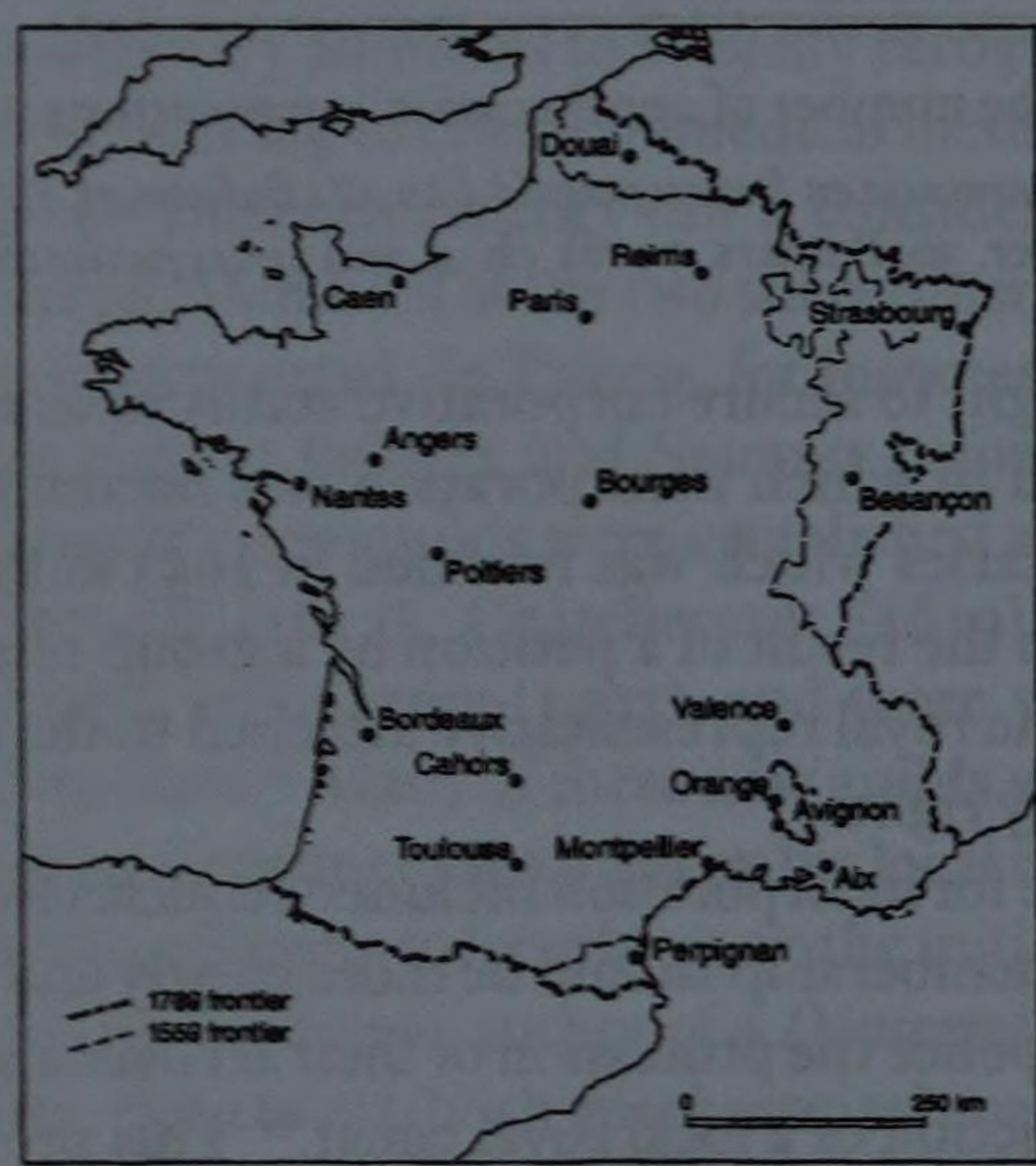
[45] L. Broche, 'Choix de pièces inédites conservées aux Archives Nationales et relatives à l'histoire de Pontoise', *Mémoires de la Société historique et archéologique de Pontoise et du Vexin*, 26 (1905), doc. xvii, 'Statuts des maîtres apothicaires', 30 July 1653, 101–2.

[46] This right was usually given to the corporation in the largest town in a region; cf. the privilege granted to the corporation of apothecaries established at Poitiers in 1541: see Rambaud, *Pharmacie*, 649–50: letters patent of Francis I, 18 June 1541.

[47] For the amalgamation of the two Paris companies, see below, Sect. E.

new corporations of apothecaries, even in small towns, were of pharmacists only. Not surprisingly, then, apothecaries in long-standing corporations wanted their separate status legally recognized, and a number of new companies came to be formed, most notably the Paris society of apothecaries in 1638.[48]

The situation as regards the incorporation of graduate physicians was more nuanced. Over the course of the late sixteenth and seventeenth centuries, the number of localities in which the practice of physic was closely regulated continued to grow with the consolidation and creation of the new medical faculties alluded to in Chapter 2.[49] Indeed, as the period also saw the development of several non-teaching faculties, which merely granted degrees—namely Valence, Orange (in the independent principality of the same name), Nantes, and Bourges—there were nineteen cities in France by 1700 where local medical graduates had a monopoly of practice (see Map 3*c*).[50] This was a right, moreover,



MAP 3*c*. Medical faculties in France in 1700

Source: adapted from a map in L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), 479, based on A. Finot, *Les Facultés de médecine de province avant la Révolution* (Paris, 1958).

[48] As we saw above, Sect. A, the spicers and apothecaries of Paris had been legally separated in 1353 but remained part of one corporation; separation proved difficult to enforce before the promulgation of the statutes of 1638: Olivier-Martin, *Organisation corporative*, 398; Wickersheimer, *Médecine à l'époque de la Renaissance*, 557–67. Another reason for seeking a new set of statutes was to tighten up the rules of entry. For the growing rigour of entrance qualifications, see below, Sect. C.

[49] See above, Ch. 2, Sect. B.

[50] Unfortunately, we only possess graduation figures in the 17th cent. for a handful of faculties, as will be explained below, Sect. D. Although a few of the new faculties had endowed professorial chairs, notably Aix, there is no evidence in the case of the new foundations that the

that no longer had to be specifically granted by the crown, for it was guaranteed by the 1579 Edict of Blois.[51] However, down to the 1630s only one new college of physicians was definitely established in a non-faculty town: the college founded at Grenoble in 1614, which was a peculiar foundation in the French context for the physicians, surgeons, and apothecaries were amalgamated under one corporate umbrella.[52] The number of non-faculty colleges began to rise again only at the end of the reign of Louis XIII. Starting with the foundation at Moulins in 1640, there were at least five new creations in the 1640s and 1650s followed by a spate of a further four in 1681 and another in 1699 (see Map 3*a*).[53]

A complete explanation for the post-1640 development is difficult to provide. Arguably, if physicians failed to incorporate, they left themselves legally vulnerable against the freshly incorporated ranks of apothecaries and surgeons. There again, the number of incorporations was too few to suggest this was a serious concern. Possibly, in some instances, the incorporations reflected a rising level of competition within the community of graduate physicians, in a period when the number of medical graduates was much higher than it had been a half-century before but when the economy and population was stagnant.[54]

As far as the foundations of 1681 were immediately concerned, it cannot be coincidental that they came at the end of a period which saw the influence of Colbert and his mercantilist policies at their height in the king's council. The establishment of a number of new medical colleges in rapid succession must be connected in part with the minister's programme for the policing and organization of knowledge which began with the foundation of the Academy of Sciences in 1666. At the same time, a further stimulus behind the creations of 1681 was probably the confessional urge that dated from the 1660s to exclude members of the Calvinist faith from professional life and that had already resulted in a 1669 decree of the royal council forbidding Huguenots from belonging to an artisanal corporation.[55] Sectarianism certainly lay behind the foundation of the

faculty was a separate entity from the body of practising physicians in the 17th cent., except at Bordeaux where the city college of physicians predated the university: see above, Sect. A, n. 24.

[51] Isambert, xiv. 403: art. 87. This was a lengthy reforming edict which was promulgated as a result of discussions at the 1576 Estates General of Blois.

[52] See A. Bordier, *La Médecine à Grenoble* (Grenoble, 1896), 56–7.

[53] The dates of foundation of most non-faculty colleges of physicians are listed in C. Coury, 'The Teaching of Medicine in France from the Beginning of the Seventeenth Century', in C. D. O'Malley (ed.), *The History of Medical Education* (Berkeley & Los Angeles, 1970), 142. Coury gives the date of foundation of Moulins as 1657. This was in fact the year in which its statutes were revised: see BN MS Fr. 18767, fos. 167–71, royal letters patent, 20 Mar. 1657, preamble.

[54] See below, Sect. D, for putative graduate numbers.

[55] Under the Edict of Nantes of 1598, the Huguenots had full civil rights and could belong to any corporation, except one where there was a specific religious exclusion clause in the statutes; thus no Huguenot could belong to the Paris Faculty/College of Physicians. For the attack on Huguenot civil rights, see D. Ligou, *Le Protestantisme en France de 1598 à 1715* (Paris, 1968).

La Rochelle college, whose membership was specifically limited to Catholics, and whose statutes became in consequence a bone of bitter contention.[56] If this were the case, though, the campaign may well not have derived from within local medical communities: Huguenot and Catholic physicians in La Rochelle, for example, appear to have worked together highly amicably down to 1681.[57] Pressure from central government, local élites, and clandestine Catholic activists like the Company of the Holy Sacrament were probably more to blame.[58]

By the last decade of the seventeenth century the map of incorporation was virtually complete and the pattern of admission finalized. In the eighteenth century there would be very few new corporations of physicians, surgeons, or apothecaries founded. Thus, the only college of physicians known to have been established in the Age of the Enlightenment was at Nancy in 1752, a town in the reign of Louis XIV still part of the duchy of Lorraine and not fully under French control until 1766.[59]

It is impossible to know for certain how many corporate medical bodies there actually were at the turn of the eighteenth century for our information is limited and sources vary. It would seem, however, that by then there were some 36–43 colleges of physicians or medical faculties,[60] some 300 corporate communities of surgeons, and possibly the same number of legally recognized apothecaries' guilds.[61] Quite clearly (see Map 3*d*) the colleges and faculties were to be found in the most populous towns of the country, with a few exceptions such as Moulins. Of the thirty-nine towns with a population of over 20,000 by the end of the Ancien Régime only nine lacked a corporate college of physicians, and of these

[56] For La Rochelle was *the* Huguenot town. See 'Pour Elie Bouhéreau [*c.*1643–*c.*1700], Elie Richard [1645–1706], & Jean Seignette [d. 1702], médecins à La Rochelle, demandeurs contre Jacques du Mont, Nicolas Venette, & Consors, médecins de la mesme ville, déffendeurs' (printed, n.d.), in Marsh's Library, Dublin, printed books L4.4.8 (no. 8). In other pamphlets Seignette is designated an apothecary. Bouhéreau left France after the Revocation of the Edict of Nantes and settled in Ireland. Other Protestants, already members of colleges of physicians, were being attacked at this time: see below, Sect. C, for the situation at Rouen and Bordeaux.

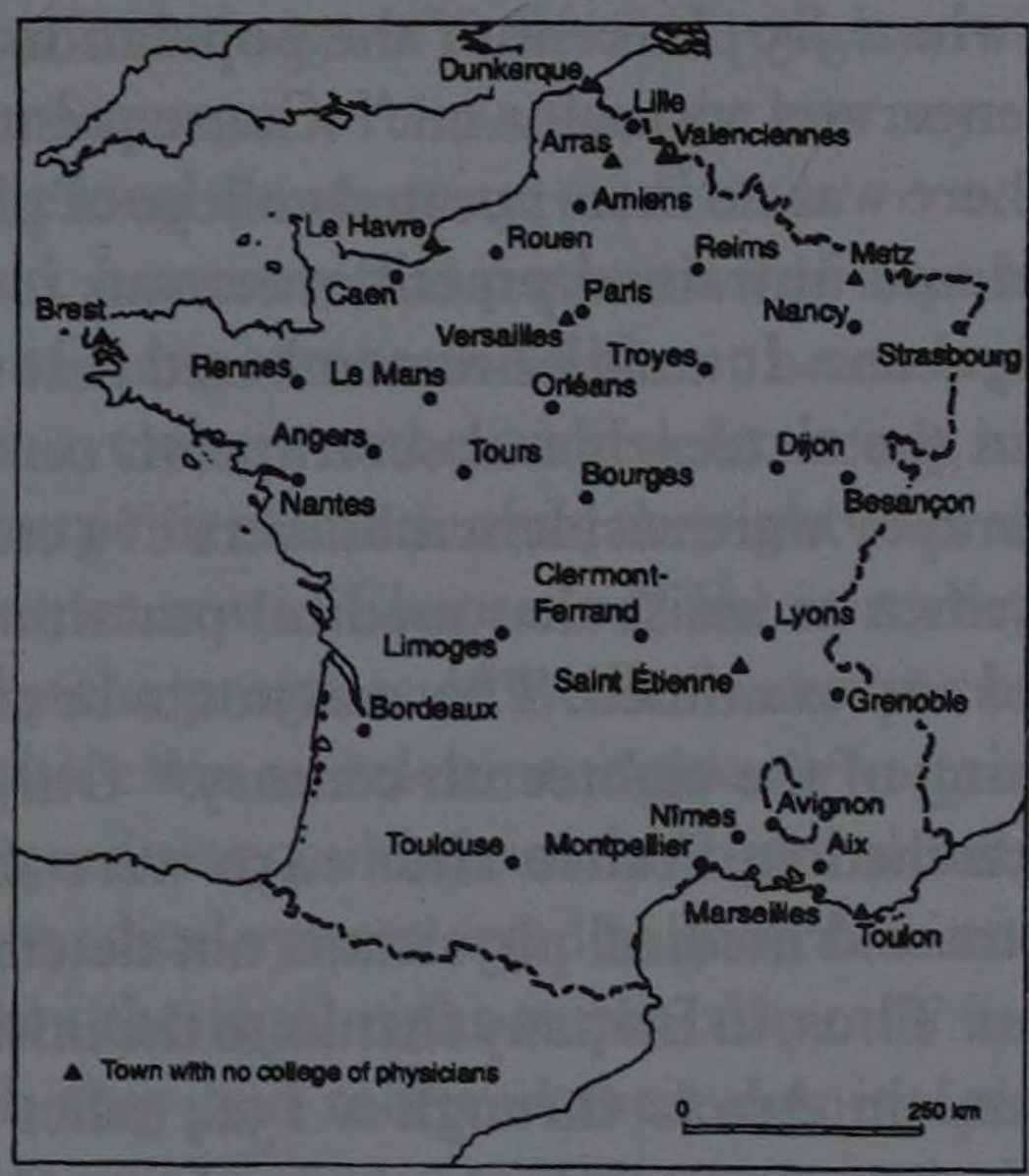
[57] Cf. the evidence for multiple, cross-confessional consultations in Elie Bouhéreau's prescription book: Marsh's Library, Dublin, MS Z2.2.15(4).

[58] Paradoxically 1681 was the date that Strasburg became attached to the French crown, and the civil rights of its Lutheran inhabitants and Lutheran university were specifically safeguarded. There were thus always Protestant physicians legally practising in Alsace, for the Revocation of the Edict of Nantes in 1685 only referred to the Calvinist community.

[59] BFMP TMP in 4°, xi, no. 156, 'Lettres patentes du roi portant établissement d'un collège royal de médecine à Nancy', 15 May 1752 (printed).

[60] There were seventeen faculty colleges and nineteen non-faculty colleges (including Bordeaux and Montpellier), whose date of foundation is known, by 1700. There seem also to have been colleges at Rennes, Béziers, Sens, Montauban, Abbeville, Dieppe, and Le Mans.

[61] The best source is Jean Verdier, *La Jurisprudence particulière de la chirurgie en France, ou traité historique et juridique des établissemens, règlemens, justice, devoirs, fonctions, honneurs, droits et privilèges, des sociétés de chirurgie* ... (2 vols.; Paris, 1764), i. 324–71.



MAP 3*d*. Towns in France of over 20,000 inhabitants in the mid-eighteenth century
Source: P. Benedict (ed.), *Cities and Social Change in Early Modern France* (London, 1989), 24–5.

six were only of recent significance: four ports and two industrial towns.[62] Equally clearly there can have been few towns over 5,000 inhabitants which did not have a corporation of surgeons and/or apothecaries. Indeed, the towns listed on Map 3*b* were sometimes smaller than this.[63]

As a result by the end of the seventeenth century the manner in which trained medical practitioners were actually organized depended very much on the size of the town. In large towns all three branches of the profession were incorporated. In medium-sized towns, in contrast, only the apothecaries and surgeons belonged to a legally recognized guild, and graduate physicians, if they existed, were independent practitioners.[64] Finally, in the small towns and urban villages (of 1,000 to 2,000 inhabitants), where only the occasional physician was to be found and where surgeons and apothecaries may or may not have been masters, there was no corporative framework at all.

The corporative medical community in the sixteenth and seventeenth centuries, then, really only existed in its fully developed form in the big cities. Out

[62] At two of these nine, Brest and Versailles, physicians belonged to an unregulated community of doctors: for an earlier ex. of such informal societies, see the reference to the pre-1681 community at La Rochelle, below, Sect. C.

[63] e.g. Civray and Bressuire. According to Expilly's mid-18th-cent. topographical dictionary, Civray had 328 hearths, at most a population of 1,500; Bressuire was too small to merit a mention: see abbé Jean-Joseph Expilly, *Dictionnaire géographique, historique et politique des Gaules et de la France* (6 vols. only published; Amsterdam, 1762–70), ii. 354.

[64] As will be explained below, Sect. D, bachelors of medicine, esp. from Montpellier, gained practical experience in small towns in the Midi, before taking their licence and doctorate.

in the countryside, where 85 per cent of the population continued to live, its organizational presence was virtually nil.[65] Consequently, even in medium-sized towns where there was no incorporated college of physicians, the distinction between trained and untrained practitioners was to an important degree only a moral not a legal one. It must be remembered that trained medical practitioners in France in the sixteenth and seventeenth centuries only enjoyed a legal monopoly when they were resident members of a corporation. There was no attempt by the crown to insist that medical practitioners nationwide had been formally trained and examined. This was not to be considered, as we shall see, until the beginning of the eighteenth century.[66] Only in a number of peripheral provinces attached to France after 1450 were the boundaries of the monopoly rights of trained medical physicians not determined by their privileges of incorporation. Thus, in Brittany thanks to the initiative of the last duke, Francis (d. 1490), and in Artois through a 1524 edict of the Holy Roman Emperor, Charles V, the practice of physic in theory had been everywhere legally restricted to medical graduates throughout the period.[67] In seventeenth-century Provence, too, the physicians' legal monopoly was not simply limited to towns with an incorporated college. By an edict of the local *parlement* of 8 February 1631, medical practice in Aix and other towns was restricted to graduates of the Aix Faculty, while practice in *lieux*, *bourgs*, and *bourgades* (small towns and important villages) was limited to the Faculty's bachelors.[68]

C. Becoming Qualified

The growing incorporation of the medical community had important consequences for the manner in which physicians, surgeons, and apothecaries were trained and became qualified. In the Middle Ages each branch of the nascent corporative medical community had developed its own training programme and prerequisites, and these in essence held good in the sixteenth and seventeenth centuries, too. A learned physician, by definition, was a graduate doctor of a medical faculty who had received a sophisticated education in medical theory. But surgeons and apothecaries were adjudged sufficiently trained when they

[65] Certainly in the 16th cent. even when corporations were given the right to police the surrounding countryside, they had difficulty in doing so. Thus, the king had to publish a second edict confirming the rights of the Poitiers apothecaries in Apr. 1551, because the first (see above) was being ignored: see Rambaud, *Pharmacie*, 651–2 (letters patent). On the other hand, the cultural influence of the corporative community should not be underestimated: see below, Sect. F.

[66] See below, Ch. 8, Sect. B.

[67] Wickersheimer, *Médecine à l'époque de la Renaissance*, 100; A. Van der Eeken, 'De uitbouw van de medische sector te Gent in de achttiende eeuw', licentiate's diss., Faculteit der letteren en wijsbegeerte groep Geschiedenis, Rijksuniversiteit Gent, 1983–4, p. 63, edict of Charles V 1524.

[68] AD Vaucluse D 61, assorted documents on medicine, unclassified.

had acquired a practical knowledge of their art through serving as an apprentice, working for a period of time as a *compagnon*, or journeyman, and then being received a master in the local community.

It should be stressed, however, that possession of a qualification of this sort was only a statement of competence and did not necessarily give the recipient the right to practise his art wherever he wished. In theory, it is true, graduates of both the Paris and Montpellier faculties had the right to practise throughout the world (*hic et ubique*), as we saw in Chapter 2.[69] Yet in reality this right was progressively restricted by the progress of medical incorporation. It tended to be only in locales where there was no relevant corporate body claiming a monopoly of local practice that a graduate could claim this right without possible legal pursuit. The corporative medical system acted to accord doctors as well as surgical and apothecary masters the legal right to practise only in the confines of the town or city in which they had received their dignity, plus perhaps the surrounding jurisdictional area.

If the newly qualified wished to practise elsewhere, then they had to apply for admission to the relevant corps, whose members were within their rights to reject the candidate or else impose certain conditions of entry. These rights were moreover liable to be upheld in local courts. According to a decree of the Paris Parlement of March 1536, for example, no outsider could practise as a physician within the capital city without first being examined by the Paris Faculty. The latter interpreted the decree very strictly. Thus, when in the same year Guy Bouguier, a bachelor of Montpellier and a doctor of Padua, applied for permission to practise in the capital, he was obliged to spend two years in becoming a bachelor, licentiate, and doctor all over again.[70]

The exact regulations in each locality varied widely reflecting local corporate customs and the plethora of legal traditions in the kingdom. No national legislation was introduced in this period to bring uniformity, but there was a growing tendency over the seventeenth century in particular towards the homogenization of such regulations. When corporate bodies applied for the revision or promulgation of new statutes, they tended to model their requests on the rights of the most prestigious corporations, notably those in Paris. State officials responsible for the issuing of royal letters patent or their registration in local sovereign courts also acted to produce a greater degree of uniformity. By the 1680s the highly decentralized corporative system was acquiring something

[69] See above, Ch. 2, Sect. A.

[70] *Commentaires de la faculté de médecine de l'université de Paris (1516–1560)*, ed. M.-L. Concasty (Paris, 1964), 255 and 259: minutes of 2 Mar. and 19 July 1536. The Faculty thereafter required all outside doctors to become Paris graduates. Only court doctors (from 1504) were exempt: see below, Ch. 4, Sect. B.

of a national persona through the procedures of what we might call 'regulatory mimicry'.

In 1500 the requirements for entry to the corporations of surgeons and apothecaries were rudimentary. Gradually a nationwide system of validating prospective recruits was formalized which restricted access to the two occupations according to a definite set of social and academic criteria. In the late Middle Ages it had been commonplace to pay little regard to the age, prior training, and even sex of those who applied to join the manual medical communities, so that the widows of members, as we noted above, had little difficulty in gaining permission to practise the art of surgery or pharmacy.[71] Candidates merely had to display a competence in the profession and a readiness to pay the entry fine and to swear to uphold the statutes. By the seventeenth century the conditions of entry were much more carefully defined.[72] Candidates had to be of good morals and from the mid-seventeenth century, even before the promulgation of the discriminatory royal edict of 1669, Catholics.[73] In addition, they had to have reached a specific age and to have served a set period of time as apprentices and then as journeymen. At the same time the entrance examination became much more rigorous, and the rights of women were increasingly severely curtailed. A widow in the seventeenth century could keep open her dead husband's shop only if it were run by a journeyman approved of by the community. Indeed, according to the 1610 revision of the 1597 statutes of the apothecaries of Angoulême, a widow who wished to stay in business had to marry, not merely employ, a qualified substitute.[74]

The exact demands that were made on entrants were determined in part by their status. Everywhere the conditions were made slightly easier for the sons of masters who were allowed to apply at a younger age and pay a smaller fine.[75] However, what primarily governed the degree of rigour in conditions of entry was the size and importance of the town in which candidates wished to practise. The age of entry and the period of apprenticeship seem to have been eventually standardized everywhere. Candidates had to be 24 to 25 years old and to have been indentured to a master for three years. But there was usually a great differ-

[71] See below, Sect. A.

[72] Extremely full information about the apothecaries' statutes can be found in F. Prévet (ed.), *Les Statuts et règlements des apothicaires: Textes intégraux accompagnés de notes* (15 fascs. in 4 vols.; Paris, 1950). There is no comparable source for the surgeons' communities.

[73] In the Protestant stronghold of Montpellier, there was an attempt as early as 1660 to prevent Huguenots becoming apothecaries: see AD Hérault G1331, court case brought by the bishop. At this date there were still 11 Protestant apothecaries out of 18; but there was only 1 Protestant surgeon (out of 12) and 2 physicians (out of 12): see AM Montpellier GG 'Santé', unclassified.

[74] Sénemaud, 'Statuts', 167; cf. with the original 1597 clause concerning widows (p. 145).

[75] A typical Ancien Régime practice, justified on the assumption that the male children of a master artisan would be naturally suited to their father's profession.

ence between large and small towns concerning the period to be served as a journeyman.

In the mid-seventeenth century the apothecaries of the small town of Pontoise insisted simply that candidate-masters had spent a further three years after their apprenticeship gaining experience, but no conditions were laid down as to where a journeyman practised.[76] Communities in important towns could be much more demanding. The statutes of the Angoulême apothecaries at the end of the sixteenth century already required that applicants had served not only in notable towns but specifically for two years in the city itself.[77] The Montpellier requirements were even stricter. A separate and legally recognized corporation of apothecaries was eventually set up in the city in 1572. According to the statutes governing its activities, no master could be received in its midst who had not first completed a three-year period as a journeyman in a local apothecary's shop. Additional statutes, promulgated in 1598, went further. Thereafter, no one was to become a master who had not served for ten years as an apprentice and journeyman.[78]

The rigour of the examinations also reflected the importance of the town. By the seventeenth century prospective entrants to any community of surgeons and apothecaries had to undergo both a theoretical and practical examination of their knowledge, but the length and extent of the process varied enormously. A standard examination for entry to a corporation of apothecaries consisted of a series of oral examinations on medicinal simples and the choice, preparation, and mixture of drugs, followed by the demonstration of three masterpieces (the *chefs d'œuvre*). The Montpellier corporation, however, demanded the preparation of four *chefs d'œuvre*, each in the house of a different master-apothecary, and from 1631 expected candidates also to sustain a public disputation.[79]

In early seventeenth-century Paris the demands made of would-be entrants to the two corporations of surgeons were particularly onerous. Everywhere else, although the practical examination of candidate-masters might be a protracted affair, the applicant was usually only put on his mettle at intervals and asked to demonstrate a knowledge of the commonplace aspects of his art. Prospective barber-surgeons in the capital, in contrast, had to prove their practical capacity *in extenso* over a month. In the first week, 'continually for seven or eight days'

[76] Broche, 'Choix de pièces inédites relatives à l'histoire de Pontoise', 102–3 (doc. xvii, 'statuts des maîtres apothicaires', 30 July 1653).

[77] Sénemaud, 'Statuts', 142.

[78] A. Germain, 'L'Apothicairerie à Montpellier sous l'Ancien Régime universitaire', *Mémoires de la Société archéologique de Montpellier*, 8 (1882), esp. 60, 68 (docs. cited). Other accounts of the incorporation of the Montpellier apothecaries can be found in Dulieu, *Pharmacie à Montpellier*, 35–43; and Lingo, 'Rise of Medical Practitioners', 136–42. Montpellier's spicer-apothecaries had been attempting to gain incorporation from the late 15th cent.

[79] Germain, 'Apothicairerie', 85.

they were to show their skill in dissecting and demonstrating the parts of the human body, and in performing a series of surgical operations on the cadaver, including paracentesis and trepanning. Then, twice a week for the next three, they were to show their dexterity 'in resolving dislocations, mending breaks, applying bandages appropriately and elegantly, [and] phlebotomizing'.[80] The Paris surgeons of Saint-Côme, on the other hand, who considered themselves far superior to the 'mechanicals' of the Barber-Surgeons' Company and the closest of all practitioners to the physicians, placed a peculiar premium on theoretical understanding, thereby emphasizing their higher status. Moreover, they tested the knowledge of prospective entrants over a period of two years, not a month or a few days.[81] Candidates had to be fluent in Latin (a significant demand given that most surgeons would not have received a classical education), and present and sustain on a number of occasions a dissertation in a public debate. The first disputation was known as the *tentativa*; it lasted five hours and included questions on logic and physics.[82] The most intensive examination occurred towards the end of the probationary period. The candidate for admission had to visit each of the members of the company in turn (some twenty-five) and satisfy them 'both in his answers and in putting his answers into practice'.[83]

The rules governing admission to the non-faculty colleges of physicians seem to have been initially even simpler than those controlling entrance to the communities of surgeons and apothecaries. There were no clauses about age, geographical origin, place of study, or experience, and no general insistence that the capacity of the candidates be examined. All that was required was that a candidate be a doctor of medicine and willing to pay the entrance fee.[84] At Lyons, for instance, according to the statutes of 1576, only applicants who had not attended a good university (presumably Paris and Montpellier) were to be examined.[85] By the mid-seventeenth century, however, entrance to some of the colleges of physicians had become much more difficult. Admittedly, at Nîmes, where new

[80] Regulations recorded in the Paris Faculty minute-book, 16 Mar. 1602: see BFMP MS 9, fos. 271–3. The final week was sometimes spent demonstrating the nature and preparation of unguents and plasters.

[81] Details from BFMP MS 2114, esp. fos. 70–5: a transcription of the statutes of 1575. MS 2114–15 contain the journal and commonplace book of a surgeon of Saint-Côme in the early 17th cent., Jérôme Delanoue (d. 1628). The surgeons of Saint-Côme, it will be recalled, claimed the right to confer degrees on applicants, not just a mastership. The two-year probationary period mirrored the time that it took a Paris medical student to pass from the baccalaureate to the doctorate.

[82] The *tentativa* was the name of the first public disputation sustained by bachelors of the Paris Faculty of Theology.

[83] BFMP MS 2114, fo. 71. This aped a similar examination undergone by Paris medical graduates before they were licensed. The surgeons of Saint-Côme had also a practical anatomy and osteology examination.

[84] For an idea of the fee, see below, Sect. D.

[85] See Lingo, 'Rise of Medical Practitioners', 183.

statutes were authorized in 1650, it seems to have always been possible to be co-opted to the college simply by showing a graduation certificate.[86] Other colleges, however, began to limit admission to graduates from specific faculties. Rouen only accepted graduates of Paris, Montpellier, and Caen; Troyes only graduates of Paris and Montpellier.[87] Rouen also began to become confessionally closed some years before the Revocation of the Edict of Nantes in 1685. A legal judgement of June 1670 had limited the number of Protestant physicians among its members to two.[88]

Several colleges, moreover, began to examine candidates regardless of the faculty in which they had graduated. Examinations were introduced at Lyons in 1631[89] and in 1657 the college at Moulins, only founded in 1640, specifically followed suit. Thereafter candidates had to be examined *inter alia* on the *Aphorisms* of Hippocrates, while those who were not the sons of Moulins physicians were expected to have practised elsewhere for at least a year.[90] The Bordeaux college must have introduced a qualifying examination even earlier, for in 1617 the Englishman James Primrose (d. 1659), a Montpellier doctor, had to sustain a public dissertation to gain admittance. In 1636 the Bordeaux college further insisted that candidates had to have served a two-year probationary term, gaining experience either by serving in a local hospital, assisting a member of the college, or practising in another town. By 1680 its terms of entry were even more rigorous. After candidates had undergone an interrogation in public they were next subjected to a series of private vivas in the houses of four resident physicians.[91]

The growing rigour of entrance procedures to the non-faculty colleges seems to have had an interesting knock-on effect. Even in towns where there was no college, incoming physicians in the late seventeenth century seem to have had to

[86] BM Nîmes MS 425, 'Registre des déliberations du corps des médecins de Nismes de 1650 à 1792', *passim*; the statutes are written on fos. 3–5.

[87] Wickersheimer, *Médicine à l'époque de la Renaissance*, 20; Olivier-Martin, *Organisation corporative*, 378.

[88] Cited in 'Factum du procez de Maître Jean Rangeard docteur en médecine & médecin iuré de la ville de Bordeaux contre une partie des autres médecins iurés de la même ville ...' (n.d.), Marsh's Library, Dublin, printed books, L4.4.8(3). Rangeard was a Huguenot physician struck from the college register in 1683 on the contested grounds that the 1670 Rouen judgement was of general application.

[89] According to the statutes of 1631. Also, according to *Journal d'un Lyonnais au XVIIe siècle*, ed. A. Champdor (Lyons, 1984), 55, no one could join the Lyons college in the second quarter of the 17th cent. who was not a doctor of Montpellier or Paris, unless he had gained four years' experience elsewhere.

[90] BN MS Fr. 18767, fos. 67–71.

[91] [J. Primrose], *Academia Monspeliensis a Jacobo Primirosio ... descripta* (Oxford, 1631), 32–8 (copy of the thesis); Péry, *Faculté de médecine de Bordeaux*, 13; Marsh's Library, Dublin, printed books L4.4.8(4), 'Ordonnance de Messieurs les Maire et Iurats, faite à Bordeaux en faveur des Sieurs Dareau & [Guillaume] Subercaseaux [d. 1700], médecins récipiendaires, le 12 novembre 1680'.

satisfy future colleagues and patients of their competence before beginning their practice. Thus at La Rochelle in June 1681 (before the foundation of the official college) one Antoine Gallot, a native of the town but not yet in practice there, sustained two public dissertations under the presidency of the dean or head of the local physicians' informal community, Jacques Du Mont. Evidently it was insufficient that Gallot was a graduate of Montpellier.[92]

The novel emphasis of the non-faculty colleges on specifying a particular degree and examining candidates in part reflected the highly decentralized state of French medical education in the seventeenth century. In France before 1500, as we have seen, only the universities of Paris and Montpellier had flourishing medical faculties; others existed, but they were of minimal importance. By 1650, however, there were many other centres of medical education, dotted around the country, and the number had increased further by 1700 with the annexation of Artois, Alsace, and Roussillon (see Map 3*c*). None was as prestigious as the two original faculties, but all graduated students, even if they did not always provide lectures in medicine, as was earlier noted.[93] This might not have been a problem if the standard of examination had been uniform throughout the university system. But this was far from being the case. The French universities were nearly all foundations of the late Middle Ages, each with their own regulations about the qualifications demanded of graduands (age, length of study, and so on) and the process of their examination. More importantly several, perhaps most, faculties, notoriously Valence and Orange, were only too ready to award degrees after the most perfunctory examination, regardless of the statutes, the result almost certainly of an inflated university system where professors could only make a reasonable living by venal means.[94] Students, then, naturally tended to migrate for graduation to faculties where degrees were awarded quickly and painlessly. Tightening the rules of entry to the colleges of physicians was a means of ensuring that members were genuinely learned in physic. It was a form of maintaining levels of quality control in the public interest, a concern which lay at the heart of the corporative system.[95]

The ease with which medical degrees might be granted had repercussions for

[92] Marsh's Library, Dublin, printed books L4.4.8(19), text of the disputations.

[93] See above, Sect. B.

[94] A large part of the professors' salary came from the fees paid by graduands. We will never know the secular trend of student numbers in the 16th and 17th cents. but there can be no doubt that there were fewer medical students than lawyers and theologians, and that nineteen faculties was a luxury. There was a tension in this period between local municipal desires that their town be a centre of higher learning and the demand for higher education. For what statistical information we have about French medical students over the period 1500–1700, see below, Sect. D.

[95] The development may also have been for more selfish reasons: just like the foundation of new colleges, tightening the entrance rules would have limited legal access to medical practice at a period when the economy and the population was stagnating: see above, Sect. B.

admission to certain faculty as well as to non-faculty colleges. As the right to practise in faculty towns was dependent upon obtaining a local medical degree, resident physicians can scarcely have welcomed falling examination standards and the subsequent prospect of ignorant colleagues. At the very least they must have found themselves drawn in two directions, anxious to increase the number of faculty graduates but also to maintain the quality of the degree. A solution, adopted at Angers and Reims, was to offer different types of degree: one that could be gained quickly and painlessly for those who had no intention of practising locally, and another, much more demanding, for prospective entrants to the college.[96] Other faculties in contrast continued to grant only one type of degree, but made significant concessions if graduates had no wish to set up in the town or its vicinity.

In the new era of competition that resulted from the presence of ultimately nineteen rather than two faculties of medicine by 1700, even the most famous French faculty, Montpellier, had to adapt to some extent to the prevailing wind and to endeavour to change with the times, albeit without compromising its international renown for high quality teaching. Thus from 1634 foreigners and ex-Paris students no longer had to study for three years in the Montpellier Faculty before they could graduate, while they and others not resident within a 12-league radius of the city could complete their doctoral degree in a matter of months. While undergoing exactly the same oral examinations and sustaining the same public dissertations as local students, they were released from the new obligation of spending six months in the period between the baccalaureate and licence gaining experience in the field.[97] Only the Paris Faculty refused to compromise with its traditional high standards. In accordance with the statutes of 1601, which were carefully enforced, no one could apply to graduate from the Faculty who had not spent four years studying medicine in the capital. In addition candidates had to be 25 and to have taken either a Paris MA within the previous four years or an MA elsewhere eight years before. Obtaining the doctorate took a further two years during which time the candidate sustained five dissertations and, immediately prior to receiving the licence, was individually examined at the home of each of the college's members (some hundred by 1650).[98] Needless to say, whereas Paris had provided the most medical graduates in the

[96] Between 1641 and 1670 Angers graduated 475 *élèves externes*: see F. Lebrun, *Les Hommes et la mort en Anjou aux XVIIe et XVIIIe siècles: Essai de démographie et de psychologie historiques* (Paris, 1971), 202. In the 18th cent. Reims eventually offered a third type for physicians who did not want to practise in France.

[97] Germain, *École de médecine*, 46–51. Presumably, it was assumed that those who came from more than 12 leagues away from the city would not be intending to practise there: see below, Sect. D, for further comments about the constraints on choosing where to practise.

[98] *Réformation de l'université de Paris* (Paris, 1601), 66–90. For the size of the Paris college, see Table 3*c*.

late Middle Ages, very few medical students graduated at Paris in the seventeenth century; the process was just too arduous.[99]

In the second half of the seventeenth century, therefore, most colleges of physicians had become examining boards and the distinction between faculty and non-faculty colleges had been considerably eroded. The overlap between them was also emphasized by the common role that the two types of college had come to play in the instruction and examination of surgeons and apothecaries. Prior to 1500 the corporations of surgeons and apothecaries were chiefly answerable to the local municipality and physicians played little part in regulating the activities of their subordinates, outside Paris and Montpellier. (As early as 1336 Paris physicians, for instance, had been empowered by the crown to visit the shops of apothecaries and spicers to check the quality of drugs on sale, although there is little evidence that they bothered to do so before the mid-fifteenth century.)[100] In the course of the sixteenth century, however, as the number of colleges grew, so the local corporations of surgeons and apothecaries lost their independence, again part of the process of regulatory mimicry noted above. Not only did physicians gain the power (with officials of the guild) to inspect surgeons and apothecaries' shops, but they also received the right to attend examinations and cast their vote, if not usually to question the candidate.[101] In return, in many cases, the physicians agreed to provide theoretical instruction in surgery and pharmacy for local apprentices. As was noted in Chapter 2, both at Paris and Montpellier permanent courses in surgery and pharmacy were established during the first half of the sixteenth century for the benefit of their subordinates as much as their own students, and the practice was gradually imitated by the newly established faculties of the late sixteenth and seventeenth centuries.[102] But the introduction of lecture courses was not limited to faculty-colleges. The statutes establishing a college at Lyons made it compulsory for the city's physicians to lay on courses for sur-

[99] It was also very costly compared with other faculties: see below, Sect. D. The Faculty could afford to be so demanding given the attraction of practising in the capital. Graduation was also made easier for sons of Paris physicians; they only had to study for two years in the Faculty and could be only 22. For the number of graduates from the Paris faculty in the 17th cent., see Table 3*a*.

[100] *Commentaires*, ed. Wickersheimer, pp. lxxxiv–lxxxvii; the faculty declared a right to supervise the apothecaries in 1322. Montpellier physicians received this right in 1496: Lingo, 'Rise of Medical Practitioners', 138. The Paris right was confirmed in a royal edict of 22 May 1336: see Isambert, iv. 424.

[101] According to the 1579 Ordonnance of Blois, art. 87, physicians in all university towns had the automatic right to be present at the examination of master surgeons and apothecaries and to inspect apothecaries' shops: see Isambert, xi. 403.

[102] See above, Ch. 2, Sect. B. The Paris Faculty entered into a specific contract with its subordinates to provide lectures: in 1506 with the barber-surgeons, and in 1536 with the apothecaries (although lectures in the second case were not established immediately).

geons and apothecaries. So too did the new statutes for the college at Nîmes in 1650.[103]

In consequence, by the mid-seventeenth century the colleges of physicians had come to play an important role in determining the knowledge-content of the three branches of the corporative profession and in overseeing the certification of trained medical practitioners. Graduate physicians—and the medical ideas taught in the faculties—had long enjoyed a higher prestige and status than the surgeons and apothecaries and their skills. Now the physicians were increasing their control over the content of the education of these 'inferior arts'. The introduction of lectures in pharmacy and surgery eroded the traditional concept of the manual medical arts as mysteries, arcane skills that were passed down from master to apprentice. So, too, did the colleges' additional power over the apothecaries to demand the use of a specific pharmaceutical manual, one that in many cases was compiled by local physicians. The Montpellier Faculty imposed its own pharmacopoeia as early as 1574; the Paris Faculty, after a long period of gestation, in 1638.[104] The influence of the faculty-colleges, moreover, was particularly extensive due to the powers of intervention given their graduate physicians who practised in smaller, non-collegiate towns. In the seventeenth century few corporations of surgeons and apothecaries enjoyed independence, wherever located, for it was always stipulated in the statutes that a doctor of medicine had to be present at examinations.

In reality, it seems likely that all the physicians in the locality turned up at examinations if they could. When only one physician attended the presentation of a masterpiece produced by a candidate for admission to the guild of apothecaries of Saint-Jean-d'Angély in 1680, the fact was specifically recorded.[105] In this way, then, the sixteenth and seventeenth centuries saw the gradual emergence of an integrated, hierarchically organized, if still only partially functionally specific,[106] corporative medical community headed by the graduate physicians. The statutory powers of resident physicians, even in non-collegiate towns, also inevitably encouraged the process of professional association.

[103] Lingo, 'Rise of Medical Practitioners', 184; BM Nîmes MS 425, fo 3^{v} (art. xiii), from the college's minute-book. Also Péry, *Faculté de médecine de Bordeaux*, 10.

[104] Dulieu, *Pharmacie*, 48: the Montpellier manual was only published in 1579. The Paris authorities had demanded a pharmacopoeia from 1550, but the Faculty only began work in earnest in 1623: see BFMP MS 12, fo. 8 (minute of 30 Jan. 1623); it was published in 1638: see *Codex pharmaceutique* (Paris, 1638). The Poitiers Faculty produced an *antidotaire* in 1611: see Rambaud, *Pharmacie*, 179. Colleges of physicians all over western Europe were producing pharmaceutical codices at this time: see G. Urdang, 'How Chemicals Entered the Official Pharmacopoeias', *Archives Internationales d'Histoire des Sciences*, 7 (1954), 303–14.

[105] M. L. C. Sandau (ed.), 'Registre des apotiquaires de la ville de Saint-Jean-d'Angély (1679–1804)', *Archives historiques de la Saintonge et de l'Aunis*, 35 (1905), 425; the others were out of town.

[106] It will be recalled that most surgeons were still barbers.

Besides the thirty-six to forty-three incorporated colleges of physicians in 1700, there must have been numerous informal corps of the kind that evidently existed at La Rochelle.[107] The corporative consciousness of the kingdom's physicians was more extensive than might at first be thought.

The incorporation of the medical community may then have acted to promote and enshrine local idiosyncrasies and differences in the processes of training and licensing. However, the administrative tendency towards regulatory mimicry kept these centrifugal pressures in check and contributed to the formation of sets of broadly similar demands being placed on would-be incorporated medical practitioners. Moreover, the strongly hierarchical orientation of the corporative system had the effect of solidifying the control of the set of physicians who sat at the apex of the medical pyramid, over and above the ancillary crafts of surgeon and apothecary. Even though the latter disciplines were making considerable advances in scientific sophistication and organization in the sixteenth and seventeenth centuries, incorporation gave physicians a firmer hold over the regulated practice of medicine than they had ever enjoyed in the past. These processes helped the Paris Faculty, along with its traditional rival in Montpellier, to maintain much of its prestige as the fount of the purest medical doctrine: the multiplication of new medical faculties arguably enhanced rather than diminished the standing of Paris and Montpellier because of the comparative strength of their teaching and rigour of their examination procedures.

D. Trained Practitioners: Numbers and Background

It is impossible to know exactly how many trained medical practitioners were operating in France in the sixteenth and seventeenth centuries. There are not even any contemporary estimates to serve as a guide. Nevertheless, enough information has survived about medical graduates over the period to provide a picture of the secular trend in the case of physicians (see Table 3*a*).[108] Records of medical graduates for some part of the sixteenth and seventeenth centuries have survived for ten of the nineteen faculties existing in 1700. As many foreigners took medical degrees in France throughout the period, the indices for individual faculties presented in the table often exaggerate the annual number of French graduates. None the less, given that the records are incomplete and the fact that an unknown, although probably small, number of French physicians

[107] See above, 194. The La Rochelle community is the only one we have evidence for.

[108] Unfortunately, the only surviving faculty matriculation register is for Montpellier (in the 16th cent.): see *La Matricule de l'université de médecine de Montpellier, 1503–1599*, ed. M. Gouron (Montpellier, 1957). To the best of our knowledge there are no extant registers of apprentice barber-surgeons or apothecaries.

TABLE 3a. *Doctorates awarded in French faculties of medicine 1400–1700 (annual averages)*[a]

	Aix	Avignon	Caen	Cahors	Montpellier[c]	Orange	Paris[c]	Reims	Toulouse[c]	Valence	Total
1390–1419							2.4 (3.0)				2.4
1420–49							1.7 (1.6)				1.7
1450–99							2.6 (3.1)				2.6
1500–9											
1510–19		0.9									
1520–9		1.0			0.3[b] (4.8)[b]		6.1 (9.4)				7.7
1530–9		0.9			1.2 (10.7)		4.5 (5.2)				6.6
1540–9		0.9			0.7 (12.9)		5.5 (8.8)				7.1
1550–9		6.6			1.7 (9.7)		5.8 (8.2)				14.1
1560–9	0.2	2.5			1.0 (6.7)		6.2 (9.2)			0.9	10.8
1570–9	0.2	3.2			1.8 (8.2)		3.4 (6.6)			1.1	8.7
1580–9	0.1	1.3	0.1		1.4 (5.0)		2.9 (3.8)	2.8			8.6
1590–9	0.5	6.1	0.8		9.4 (23.5)		3.8 (2.2)	0.7			21.3
1600–9	0.2	10.2	1.7	1.4[b]		0.4	2.5 (4.1)	2.5			18.9
1610–19	1.9	21.6	3.1	4.0	19.3[b] (22.2)	0.9	5.5 (7.1)	7.6			63.9
1620–9	8.0	10.6	5.1	4.3	14.2 (17.9)	2.0	4.8 (5.3)	8.7	(6.0)		63.7
1630–9	7.3	10.7	4.0	5.5	16.9 (19.8)	3.5	3.2 (3.5)	6.4	(5.3)		62.8
1640–9	7.0	11.6	2.2[b]	7.9	20.3 (23.1)	0.6	3.1 (3.7)	5.7	6.8		65.0
1650–9	5.9	14.8	6.7	6.8	19.3 (21.4)	0.9	3.4 (4.9)	4.0	8.2		70.0
1660–9	6.8	18.2	6.8	10.3	16.3 (21.2)	1.1	3.7 (4.0)	2.4	9.8		68.4
1670–9	8.2	14.9	0.9[b]		15.1 (16.4)	3.1	3.0 (3.8)	4.6	3.1[b]		53.9
1680–9	7.1	9.5	1.6[b]		11.8 (13.9)	2.2	3.1 (3.6)	29.9			65.2
1690–9	3.4	7.8	1.3		14.6 (15.1)	0.7	4.1 (3.4)	21.0			52.9

[a] figures for Strasburg are not included; the town was only annexed to France in 1681.
[b] annual averages for these decades are based on incomplete data.
[c] figures in brackets are the annual number of bachelors' degrees awarded.

Source: The limited information available is drawn from D. Julia and J. Revel, 'Les Étudiants et leurs études dans la France moderne', in eid. (eds.), *Les Universités européennes du XVIe au XVIIe siècle. Histoire sociale des populations étudiantes*, ii (Paris, 1989), 459–86; L. W. B. Brockliss, 'The University of Paris in the Sixteenth and Seventeenth Centuries', Ph.D. diss. Cambridge, 1976, pp. 472–3; and id., 'Patterns of Attendance at the University of Paris 1400–1800', *Historical Journal*, 21/3 (1978), 515.

took degrees outside France in the sixteenth and seventeenth centuries, the overall annual figure is likely to be an underestimate of the total. It was only at Reims in the 1680s and 1690s that a large proportion—at least a third—of the graduates were foreigners, but in this particular case the overall annual total is still not skewed because allowance has to be made for the absence of information concerning Cahors and Toulouse.[109]

Although, then, the graduation records are incomplete, the pattern that they reveal is unlikely to be highly defective. From the bald figures of the number of doctorates awarded per annum it would seem that the number of graduating physicians increased nearly tenfold over the years 1520 to 1660, before falling back in the last decades of the seventeenth century to a position some seven times higher than their initial level. In reality, the scale of increase was almost certainly less dramatic. In the sixteenth century, when there were few graduates from other faculties besides Paris and Montpellier, it is clear that many medical students were content with the baccalaureate and did not proceed to the doctorate, a reflection presumably of the small number of collegiate towns and their relatively low standards of entry. In consequence, the number of baccalaureates per annum gives a better idea of the number of graduate physicians aspiring to practise each year (see Table 3*b*). The figures we have suggest that, as a result, the increase in the number of physicians between 1520 and 1650 was probably nearer a fivefold than a tenfold one, the growth rate being relatively slow in the sixteenth century (or at least the initial expansion being curtailed by the Wars of Religion), then accelerating rapidly in the period 1590–1620.

Using the revised graduate figures in Table 3*b*, it is possible to derive an idea of the overall number of graduate physicians in the sixteenth and seventeenth centuries, not just the trend. On the assumption that a graduate physician had a working lifespan of twenty-five years, it can be assumed that there were only some 400 trained physicians in 1520, compared with 1,750 in the 1650s, although the number had possibly dropped again to some 1,300 by the end of the seventeenth century. Arguably, this decline/stagnation after 1660 reflected an adjustment to prevailing market conditions in a period of demographic and economic stagnation: perhaps in the second half of the seventeenth century the demand for the physicians' services was not large enough to sustain nearly 2,000 medical graduates.[110]

[109] The surviving graduate register of the Reims faculty, BM Reims MS 1085, reveals that some 40% of graduates were foreigners in the early modern period. But before 1700 the proportion was smaller. An equally high proportion of Montpellier matriculands were foreign in the early 16th cent. (36.9%) but the figure soon dropped dramatically: see the table in R. Chartier *et al.*, *L'Éducation en France du XVIe au XVIIIe siècle* (Paris, 1976), 272.

[110] The relatively restricted nature of the graduate physicians' clientele in the 16th and 17th centuries will be discussed below, Ch. 5, Sect. A. It will be recalled that the mid-17th cent. saw the

TABLE 3*b*. *Number of physicians and surgeons in sixteenth- and seventeenth-century France (estimated totals)*

	medical degrees (annual averages)	physicians[a]	surgeons[b]
1500–9			
1510–19			
1520–9	(14.2)[c d]		
1530–9	(15.9)	398	1,910
1540–9	(21.7)		
1550–9	(17.9)	448	2,150
1560–9	(15.9)		
1570–9	(14.8)		
1580–9	(8.8)		
1590–9	(25.7)	643	3,086
1600–9	18.9[c]		
1610–19	63.9[c]		
1620–9	63.7		
1630–9	62.8		
1640–9	65.0[c]		
1650–9	70.0	1750	8,400
1660–9	68.4		
1670–9	53.9[c]		
1680–9	65.2[c]		
1690–9	52.9	1323	6,350

[a] Totals based on an estimated average working-career of graduate physicians of twenty-five years.

[b] Totals based on the assumption that the proportion of physicians to surgeons was 1 : 4.8. For the basis of this assumption, see below, pp.201–2. The totals of both physicians and surgeons are unlikely to be very accurate, but there can be little doubt about the overall rising trend.

[c] annual averages based on incomplete data.

[d] figures in brackets represent the average annual number of bachelors' degrees given at Paris and Montpellier as listed in Table 3*a*.

It is also possible, although with much less accuracy, to calculate the number of surgeons over this period. As we will explain in Chapter 8, it can be assumed that the national ratio of physicians to surgeons at the end of the eighteenth century was no lower than 1 to 4.8. On the assumption that this minimum ratio was the same for the sixteenth and seventeenth centuries, then there were at least 2,000

foundation of a number of medical colleges in large towns, possibly an attempt to restrict entry in the new market conditions: see above, Sect. B. There seems to have been a similar rapid expansion in the number of graduate physicians in the United Provinces in the 17th cent., followed by a period of contraction in the early 18th cent.: see W. Frijhoff, *La Société néederlandaise et ses gradués, 1575–1814* (Amsterdam, 1981), 134–7, 230–45.

surgeons in the early sixteenth century and over 8,000 by the 1650s. What the real number of surgeons was over the period is impossible to say, but a figure of 12,000 in the second half of the seventeenth century is not implausible, given that in the eighteenth century there were parts of France where the ratio of physicians to surgeons was as high as 1 to 12.[111] Unfortunately, no estimates can be made of the number of apothecaries in the sixteenth and seventeenth centuries. All that can be said (see Tables 3*c* and *d*) is that they were probably more numerous in this period than surgeons, at least while they remained attached to the spicers.

Our knowledge about the number of trained practitioners in particular towns is equally sparse, for the only medical corporation for which there is continual and accurate information is the Paris College of Physicians, thanks to the survival of the Faculty minute-book.[112] Again, however, enough information has survived to make a provisional analysis possible. Not surprisingly, there were more physicians in Paris, a town of 250,000 by 1560 and 500,000 by 1700 than in other French cities (see Tables 3*c* and *d*). The capital may only have boasted twenty doctors in the first decade of the sixteenth century but by the second half of the seventeenth century the number had risen to over 100. The other medical colleges were always much smaller in size, even if, paradoxically, provincial towns were normally better served in terms of physicians per head. In the mid-sixteenth century Lyons, the kingdom's third largest city with a population of 58,000, only had eight physicians, although the number had risen to fourteen by 1571 and twenty by the early seventeenth century, by which date the population had fallen considerably. Montpellier in 1544 (population 12,500) conversely had twenty-two but this was presumably a reflection of the city's importance as a centre of medical training; the number, moreover, had fallen back to ten by 1600 (although the population was by then 15,500).[113] In the seventeenth century few medical colleges could even boast ten members. At Nîmes in the second half of the seventeenth century (population 14,000–17,000) the number fluctuated around the seven mark.[114] The much larger city of Bordeaux in the same period (population 40,000–45,000), admittedly, had fourteen or fifteen resident physicians but, significantly, this figure was deemed too large to guarantee an adequate practice. The incompetent doctor, it was argued, was quickly shown up:

[111] See below, Ch. 8, Sect. D. Information for the national minimum ratio in the late 18th cent. is based on the statistics in J.-P. Goubert, 'The Extent of Medical Practice in France around 1780', *Journal of Social History*, 10 (1976–7), 415.

[112] BFMP MSS 7–17, Faculty *délibérations* 1500–1700 (complete); the minute-book has been published for the years 1390 to 1560 in *Commentaires*, ed. Wickersheimer and *Commentaires*, ed. Concasty. The names of the resident doctors of the faculty (and hence the names of the members of the Paris college) are usually listed at the beginning of each academic year.

[113] Lingo, 'Rise of Medical Practitioners', 252–3: figures based on tax records; there was no Lyons college before 1576. Figures are given for all branches.

[114] BM Nîmes MS 425; seven agreed to the 1650 statutes (fo. 2).

TABLE 3c: *Number of trained medical practitioners in Paris, 1500–1700*

	Physicians[a] (annual averages)	Surgeons	Barber-Surgeons	Apothecaries	Approx. population	Physicians per 10,000
1500–9	21.0[b]		44 (1506)[c]			
1510–19						
1520–9	39.2		46 (1516–17)[d]			
1530–9			50 (1531–2)[d]			
1540–9	59.2					
1550–9				104 (1551)[g]		
1560–9	73.0				250,000	2.9
1570–9	76.0					
1580–9	63.2					
1590–9	48.6					
1600–9	46.5	25[e]	300[e]	600[e]	250,000	1.9
1610–19	59.2					
1620–9	80.8					
1630–9						
1640–9			300[f]			
1650–9	108.8				450,000	2.4
1660–9	116.1	Combined company				
1670–9	106.7	150[f]				
1680–9	95.2					
1690–9	95.6				510,000	1.9

[a] in the decade 1400–9, there was an annual average of 29 physicians in the capital.

[b] The physicians' totals are based on the number of Faculty members. From 1504, however, court physicians could practise in the capital without being a member of the Paris Faculty, so the real number of physicians in the capital in the sixteenth and seventeenth centuries was always higher than the table suggests. In the second half of the seventeenth century there may have been a further fifty graduate physicians in Paris: see below, Ch. 5, Sect. E. In consequence, at this date there may have been nearer 3 physicians per 10,000 inhabitants.

[c] number of barber-surgeons signing a contract with the Faculty in that year.

[d] number of barber-surgeons taking an oath of allegiance to the Faculty in those years; from the late 1530s the barber-surgeons hardly ever turned up to take the oath, or sent along one official.

[e] contemporary estimates given by a leading surgeon of Saint-Côme, Jérôme Delanoue. The apothecaries' estimate possibly includes the spicers.

[f] estimate given by Gelfand: see *sources*.

[g] number of shops in that year according to the Faculty registers.

Sources: *Commentaires de la faculté de médecine de l'université de Paris*, ed. E. Wickersheimer (Paris, 1905), *passim*, annual lists of Faculty members; pp. 476–7, for the barbers' contract. *Commentaires de la faculté de médecine de l'université de Paris (1516–1560)*, ed. M. L. Concasty (Paris, 1964), *passim*, annual lists of Faculty members; *passim*, years 1516 to 1540, annual lists of barber-surgeons taking the oath; p. 479[a], for the number of apothecaries' shops. BFMP MS 7–17, minutes of the Faculty 1560–1700, *passim*: annual lists of Faculty members (data has not been collected for the years 1630–50). BFMP MS 2115, fos. 41–2, Delanoue's journal. T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980), 23, 36; P. Benedict (ed.), *Cities and Social Change in Early Modern France* (London, 1989), 24, estimates of the population of Paris.

TABLE 3*d*. *Number of trained medical practitioners in eight French provincial towns, 1500–1700*

Town	Physicians	Surgeons	Apothecaries	Approx. population	Physicians per 10,000
Angoulême	4 (1688)		10 (1688)	11,000[a]	3.6
Bordeaux	15 (*c*.1650)	12 (*c*.1650)		40,000	3.8
	14 (1680s)			45,000	3.1
Dijon	5 (1556)	8 (1556)		12,500	4.0
Lyons	8 (1545)	30 (1545)	45 (1545)	58,000	1.4
	14 (1571)	28 (1571)	42 (1571)		
	c.20 (*c*.1620)			32,500	6.6
Montpellier	22 (1544)	20 (1544)	31 (1544)	12,500	16.9
	10 (1600)	11 (1600)	27 (1600)	15,500	6.3
	12 (*c*.1660)	13 (*c*.1660)	18 (*c*.1660)		
Nîmes	7 (1660–1700)			14,000	5.0
				17,000	4.1
Poitiers			20–4 (*c*.1500)		
			18 (1552)	15,000	
			19 (1582)		
			15 (1628)		
			20 (1632)	23,500	
Reims	6 (1701)	20 (1701)	6 (1701)	31,000	1.9

[a] Estimate based on the figure for the mid-eighteenth century, given in J.-J. Expilly, *Dictionnaire géographique, historique et politique des Gaules et de la France* (6 vols. only published; Paris, 1762–70), i. 189: Expilly's figure is 11,200.

Sources: 'Statuts des apothicaires d'Angoulême en 1597', ed. E. Sénemaud, *Bulletin de la Société archéologique et historique de la Charente*, 3rd ser. 3 (1861), 173; G. Pery, *Histoire de la faculté de médecine de Bordeaux et de l'enseignement médical dans cette ville, 1441–1888* (Bordeaux, 1888), 14–15; Marsh's Library, Dublin, MS Z2. 2. 15(5), documents concerning the physician Rangeard, and his conflict with the Bordeaux college (see p. 193, n.88, above); Benedict, *Cities and Social Change*, pp. 134, 141; A. K. Lingo, 'The Rise of Medical Practitioners in Sixteenth-Century France: The Case of Lyon and Montpellier', Ph.D. diss. Univ. of California, 1980, 252–3; *Journal d'un Lyonnais au XVIIe siècle*, ed. A. Champdor (Lyons, 1984), 55; BM Nîmes MS 425, 'Registre des déliberations du corps des médecins de Nîmes de 1650 à 1792', *passim* (e.g. fos. 1–2, list of physicians subscribing to the 1649 statutes); AM Montpellier GG 'Santé', unclassified series, mid-seventeenth-century document; P. Rambaud, *La Pharmacie en Poitou jusqu'à l'an XI* (*Bulletin et Mémoires de la Société des Antiquaires de l'Ouest*, 2nd ser. 30: Poitiers, 1906), 72–3, 102–7, 661, 664, 685; AM Reims R *fonds ancien* 591, capitation register 1701 (no fo.). Unless otherwise stated, figures of approx. population are from P. Benedict, *Cities and Social Change in Early Modern France* (London, 1989), 24–5 .

'Since in Bordeaux the number of physicians is always quite large, and the choice of [the inhabitants] voluntary, the lack of worth [of a practitioner] is sufficiently punished by his lack of employment.'[115]

[115] Marsh's Library, Dublin, MS Z2.2.15(6), 'A Nos Seigneurs de Parlement', 5 (n.d.).

The corporations of surgeons and apothecaries were larger than the colleges of physicians, but not always dramatically so. At Paris in the first decades of the sixteenth century there were apparently only forty to fifty barber-surgeons, if the company had possibly expanded by the 1600s to 300. Moreover, when the barber-surgeons combined with the much smaller corporation of the surgeons of Saint-Côme in 1655, their numbers fell back to 150 as many barbers failed to join the new company.[116] The number of apothecaries' shops in the capital, on the other hand, seems to have been much larger. In 1551 there were 104 such shops and in the early seventeenth century the number was put at 600, although this estimate probably combined under one head the apothecaries and spicers, still grouped together, as we saw, under the same guild umbrella.[117] In general, as was said, apothecaries were more numerous than surgeons during the sixteenth and seventeenth centuries. At Lyons in 1571 there were forty-two apothecaries compared with twenty-eight surgeons, while at Montpellier in 1600 there were twenty-seven compared with eleven. Indeed, as the Montpellier figure suggests, there were scarcely more surgeons than physicians in some big towns. At Bordeaux in the mid-seventeenth century there were actually fewer: only twelve.[118] Apothecaries were certainly much in evidence even in quite humble towns. The number of apothecaries at Cognac rose from five to ten between 1615 and 1623, there were seven at Pontoise in 1653, and eight at Saint-Jean-d'Angély around 1680 (plus another four practising in the jurisdiction of the local court).[119]

Broadly speaking, membership of the Paris College of Physicians expanded over the two centuries to the same extent as the total number of graduates (see Table 3*b*), but the greatest rate of increase came in the period 1500 to 1560, not in the early seventeenth century.[120] Moreover, if the Paris college also witnessed a second period of growth in the first half of the seventeenth century, before falling back again after 1670, much of the renewed expansion was a catching-up operation, for membership had collapsed in the final years of the Wars of Religion.[121]

Printed memo in a collection of pamphlets and letters concerning Rangeard's quarrel with the Bordeaux college in 1683–4: see above n. 88.

[116] Figures from *Commentaires*, ed. Wickersheimer, 476–7: number of surgeons signing a contract with the physicians 1506; *Commentaires*, ed. Concasty, *passim*: number of barber-surgeons taking an oath to the faculty each year, 1516–40; BFMP MS 2115, fos. 41–2: papers of the surgeon of Saint-Côme, Jérôme Delanoue; Gelfand, *Professionalizing Modern Medicine*, 23, 26.

[117] *Commentaires*, ed. Concasty, 479[a]. BFMP MS 2115, Delanoue's journal, fos. 41–2.

[118] Pery, *Faculté de médecine de Bordeaux*, 14–15.

[119] J. Pellison, 'Les Maîtres apothicaires de Cognac', *Archives historiques de la Saintonge et de l'Aunis*, 1 (1874), 401–10, and 4 (1877), esp. 210–14; Broche, 'Choix de pièces', 101; Sandau, 'Registre', 429.

[120] Unfortunately, we do not know what happened to graduate numbers before 1520, for the crucial Montpellier data is lacking.

[121] The high point was reached in 1668–9, when membership of the college stood at 125.

Despite the expansion in numbers, furthermore, Paris was undersupplied with graduate physicians compared with some other large European cities for which figures are available (see Table 3*e*). The number of physicians per 10,000 inhabitants was roughly comparable with the number in London at the turn of the seventeenth century,[122] but much lower than that for Venice and Milan throughout the period. However, the same was not necessarily true of France's second city for which a ratio can be obtained on two occasions over the period. If the ratio at Lyons about 1550 was only 1.4 to 10,000 inhabitants, it had risen to 6.6 by the 1620s, comparable with the figure for Barcelona in 1599 (6.9) but higher than the mid-sixteenth-century ratios for Italian cities of a similar size: Mantua, Brescia, and Cremona (3.4–4.8).[123]

TABLE 3*e*. *Number of graduate physicians in selected European cities outside France 1500–1700*

City	Physicians	Approx. Population	physicians per 10,000
Barcelona	22 (1599)	32,000	6.9
Basle	17 (1555)	10,000	17.0
Brescia	18 (1552)	43,000	4.2
Cremona	12 (1548)	35,000	3.4
Edinburgh	21 (1681)		
	34 (1700)	30,000[c]	11.3
London	50 (1580–1600)	200,000	2.5
Mantua	25 (1539)	43,000	5.8
Milan	65 (1517)	85,000	7.6
Venice	59 (1543)	130,000	4.5
	75 (1564)	169,000	4.4

Sources: Thomas Platter, *Journal of a Younger Brother: The Life of Thomas Platter as a Medical Student at Montpellier at the Close of the Sixteenth Century*, trans. and introd. S. Jennett (London, 1963), 199, 208; R. Palmer, 'Physicians and the State in Post-Medieval Italy', in A. W. Russell (ed.), *The Town and State Physician from the Middle Ages to the Enlightenment* (Wolfenbüttel, 1981), 52; R. Stott, 'The Incorporation of Surgeons and Medical Education and Practice in Edinburgh, 1696–1755', Ph.D. diss. Edinburgh, 1984, pp. 45, 82, 121 (there were 60 apothecaries in Edinburgh in 1707 and 59 surgeons in 1723); M. Pelling and C. Webster, 'Medical Practitioners', in C. Webster (ed.), *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge, 1979), 188; H. Kamen, *Spain in the Later Seventeenth Century 1665–1700* (London, 1980), 154; H. Guggisberg, *Basel in the Sixteenth Century* (St Louis, Miss., 1982), 3; T. Smout, *A History of the Scottish People* (Bungay, 1973 edn.), 146.

[122] At the same period in London, there were 100 surgeons, 100 apothecaries, and 250 (estimated) illegal or semi-legal practitioners. See M. Pelling and C. Webster, 'Medical Practitioners', in C. Webster (ed.), *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge, 1979), 188.

[123] Admittedly the ratio for Lyons in the 1620s may be too favourable, for the city may have had more than 32,500 inhabitants by that date: see Table 3*d*.

In large corporations, especially in the Paris companies of barber-surgeons and apothecaries, the examination of candidates for membership in the sixteenth and seventeenth centuries must have been a regular occurrence.[124] Most companies, however, must have admitted candidates rarely. This was particularly true of the provincial colleges of physicians. Whereas three to four doctors joined the Paris medical college each year in the seventeenth century, elsewhere the figure was close to three to four per decade. The Bordeaux college seems to have admitted four doctors in 1679 but this was exceptional.[125] As a result examining candidates cannot usually have been an onerous task and standards would have been easy to maintain. Conversely, if the practical examination for entry to the company of Paris barber-surgeons really did last a month in the early seventeenth century, members of the corporation (especially the officials) must have spent a large part of their time in vetting entrants, which probably had a detrimental effect on the rigour of the examinations.[126]

Information about admissions suggests that most applicants to medical corporations came from the vicinity. Sometimes this was even stipulated in the statutes. Bordeaux surgeons, for instance, had to be natives.[127] Colleges of physicians could be even more closed than corporations of surgeons and apothecaries. Of the seven members of the Nîmois college in 1650 only two were not born in the city, and of three more who joined in the next six years, only Frederick Guib (presumably John Frederick Guibb, d. 1681) of Dunfermline was an outsider.[128] The only relatively open college was Paris where in the first half of the seventeenth century over 50 per cent of entrants were not from the capital. There again only 12 per cent came from south of the Loire.[129]

A great many candidates for admission to the corporative medical community

[124] Unfortunately there are no admission registers for the two Paris companies for this period, but if there were really 300 barber-surgeons in the 1600s, then, assuming again a working life-span of 25 years, the company would have needed to have recruited 10 to 12 new members a year. New barber-surgeons were supposed to pay a fine to the faculty on inception as a symbol of their subordination. This was duly paid in the period 1517 to 1560; during these years 2 to 3 new barber-surgeons joined the company each year; the maximum was 6 in 1553 (*Commentaires*, ed. Concasty, *sub* annual accounts).

[125] Marsh's Library, Dublin, MS Z2.2.15(6), transcription of a membership register kept in the Bordeaux town hall.

[126] The problems involved in processing large numbers of students was why university examinations, esp. in law, were often so perfunctory. See L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), 77–82, for an account of the corruption in the law faculties.

[127] Wickersheimer, *Médecine à l'époque de la Renaissance*, 185.

[128] BM Nîmes MS 425, fos. 7r–12v: Guibb was admitted on 9 Nov. 1651. One John Frederick Guibb supposedly joined the Valence college in 1651.

[129] See the table of the geographical origin of bachelors of medicine at the faculty in L. W. B. Brockliss, 'The University of Paris in the Sixteenth and Seventeenth Centuries', Ph.D. diss., Cambridge, 1976, p. 366.

belonged to medical families. Apothecaries and surgeons may have been drawn from other crafts but it would appear that most physicians were either the sons of doctors of medicine or of surgeons and apothecaries. The redoubtable Gui Patin, the son of a Beauvais *avocat*, was unusual in coming from a legal family.[130] Not surprisingly, family dynasties were much in evidence, even at Paris. At Cognac in 1619 three candidates applied for admission to the apothecaries' guild and all three were related to existing members. One, Jean Moris(c)et, was the second son of the apothecary Mathurin Moriscet to be admitted in as many years.[131]

On the other hand, dynasties do not often seem to have extended beyond the third generation, a further indication, in a status-ridden society, that medicine's position as an honourable profession was ambiguous.[132] Pharmacy and surgery were clearly manual, albeit highly skilled and learned, crafts, while physic, if undoubtedly a liberal, cerebral art, did not have the status of the Bar or the Church. As in the late Middle Ages, it was the humblest of the three traditional liberal professions. It was not a purely intellectual art, for physicians still had to touch their patients, however lightly.[133] Families, therefore, used medicine as a springboard to higher things, frequently ascending from membership of a subordinate company to a medical college, and then occasionally moving from there into the ranks of the nobility. Not surprisingly, given medicine's dubious status very few physicians came from noble families; one notable exception was Pierre Richer de Belleval (1564–1632), first permanent professor of anatomy and botany at Montpellier.[134]

In the century 1550 to 1650 a particularly upwardly mobile medical family in the capital was the Seguin.[135] The first member to belong to the Paris college was Simon Seguin, licensed in 1556. Nothing is known of his origin, nor his career as a physician, but that he had established the family fortune by his death in 1588 cannot be denied. His son Pierre (d. 1648) joined the college in 1590. With the

[130] Evidence based on a study of the medical biographies contained in Jacques-Albert Hazon, *Notice des hommes les plus célèbres de la faculté de médecine* [*Paris*] *1110–1750* (Paris, 1773); in Dulieu, *Médecine à Montpellier*, ii, and iii. *L'Époque classique* (2 pts. in 2 vols.; Avignon, 1983–6), pt. 2. For Patin, see Hazon, *Notice, sub anno* 1627 (the year of his doctorate).

[131] Pellison, 'Maîtres apothicaires', 211–12.

[132] An ex. of a five-generation family of apothecaries was the Geoffroy of Paris, whose final representative, Claude-François, died in 1753. See P. Dorveaux, 'Journal de Matthieu-François Geoffroy maître apothecaire de Paris, 1644–1708', *Bulletin de la Société française de l'histoire de médecine*, 5 (1906), 72–3, and D. J. Sturdy, *Science and Social Status: The Members of the Académie des Sciences, 1666–1750* (Woodbridge, 1995), ch. 20.

[133] See the comments above, Ch. 2, Sect. A. Also, see below, Ch. 5, Sect. B, for a discussion of the relatively hands-off medical consultation.

[134] Biog. details in Dulieu, *Médecine à Montpellier*, iii/2. 789–90. Of the 74 professors at Montpellier in the 17th and 18th cents. only 4 were of noble origin: ibid., biographical portraits.

[135] Brockliss, 'University of Paris in the Sixteenth and Seventeenth Centuries', 268–70.

money left him, he was able to establish a prominent position in the medical world. In 1594 he purchased the position of royal professor in surgery at the Collège Royal from a colleague, Jean Martin, and five years later replaced this with a professorship in medicine.[136] At some later date Pierre made a great leap forward when he became *médecin ordinaire*, or royal physician ordinary, to the king, an office that reputedly cost him 50,000 *livres*.[137] He was to sell this post, however, in 1623 when he was advanced to the position of premier physician to the queen. By then he had found himself in the position to promote the family's social fortunes. His eldest son was made a *conseiller* or magistrate of the Paris Parlement in 1615 and another dean of the Paris collegiate church of Saint-Germain-l'Auxerrois. His fortune, though, must have been limited for his youngest son Michel had to enter the Faculty. To help him on his way he was invested with his father's royal professorship. Unfortunately Michel died in 1623 and Pierre was left with the professorship once more on his hands. Nothing daunted, he set out to help a younger branch of the family. A nephew, Claude (d. 1681), joined the college and was given the professorship in 1630. Claude was the last of the Seguin to serve as a Paris physician. In the next generation Claude's son Louis became a *conseiller* of the Paris Parlement, thereby completing the successful elevation of two branches of the family to the *noblesse de robe*.[138]

But if members of the medical corporations were largely drawn from the local community, it should not be thought that their horizons were correspondingly narrow. What is striking (although as always the evidence is impressionistic) is how many physicians, surgeons, and apothecaries had travelled widely before they settled down. Perhaps this is more notable for physicians rather than surgeons or apothecaries, for the latter were essentially artisans, and craftsmen in early modern France were accustomed to seeing professional itineracy as a key part of the training process. The so-called *tour de France*, in which most journeymen engaged, allowed candidates to a trade experience of a wider range of professional approaches and techniques than

[136] These were not faculty posts but professorships attached to the independent foundation of Francis I, the Collège Royal. The Collège Royal offered lectures in the liberal arts and the sciences (although not theology) at a supposedly higher level than those to be found in the *collèges de plein exercice* and the faculties. Eventually there were four professorships in medicine: theoretical medicine, botany, surgery, and pharmacy. The standard history remains A. Lefranc, *Histoire du Collège de France depuis ses origines jusqu'à la fin du Premier Empire* (Paris, 1893).

[137] Of the medical offices in the royal household only the position of premier physician to the king was not venal.

[138] In 1643 Claude paid 50,000 *livres* for the office of *médecin ordinaire* of the king, then sold it at a 30% profit seven years later: see Gui Patin, *Lettres*, ed. J. H. Reveillé-Parise (3 vols.; Paris, 1846), ii. 5 (letter to Spon, 3 May 1650). The Seguins' success story was, admittedly, atypical: their elevation owed much to the fact that they had gained a court office. For financial rewards of medical practice more generally, see below, Ch. 5, Sect. D.

would have been available within any one locality, or than were available in any form of book-learning.[139]

Admittedly, very few members of the corporative medical community seem to have gone abroad. Many more foreigners, especially physicians, came to study in France.[140] Those who did venture outside the kingdom were usually attached to the army or navy, like Ambroise Paré,[141] or travelled in the retinues of ambassadors or nobles and ecclesiastics on the Grand Tour.[142] A few, however, did go abroad on their own initiative. Particularly exceptional were Paul Constant, an apothecary at Poitiers from 1586, and Elie Bouhéreau, a physician at La Rochelle in the early 1680s, who both had independently visited Italy and seen the Eternal City. Indeed, in their case their experience was all the more peculiar in that both were Huguenots: Protestants may have been more inclined to international travel, but seldom in the direction of Rome![143] It was much more usual for medical practitioners to have travelled quite widely and at length within the kingdom, again often in the entourage of princes and nobles. The mid-sixteenth-century Montpellier physician and professor Antoine Saporta (1507–73), for instance, was contracted to spend three months of the year following the court of Navarre, based but not always resident at Nérac.[144]

Surgeons and apothecaries occasionally got their first glimpse of a wider world when they were apprentices, for it was not uncommon to be placed with a master a long way from home. Thus Étienne-François Geoffroy (1672–1731), son of a particularly affluent Paris apothecary, Mathurin-François (1644–1708), spent a year, 1692–3, with the Montpellier apothecary Pierre Sanche (b. 1626), while Sanche fils took up residence with Geoffroy père.[145] Sometimes apothecaries especially, for whom—unlike surgeons—some knowledge of Latin was *de rigueur* (they had to be able to read physicians' prescriptions), had escaped from

[139] On this practice, see E. Coornaert, *Les Compagnonnages en France du moyen âge à nos jours* (Paris, 1966), esp. ch. 2.

[140] See above, n. 109.

[141] For the development of army medicine in this period, see below, Ch. 4, Sect. C.

[142] e.g. the Paris apothecary-turned-physician Étienne-François Geoffroy: see below, n. 145.

[143] Rambaud, *Pharmacie en Poitou*, 596–8; N. J. White, *Four Good Men: L. Challoner, J. Taylor, N. Marsh, E. Bouhéreau* (Dublin, 1927), 74.

[144] Felix Platter, *Beloved Son Felix: The Journal of Felix Platter, a Medical Student in Montpellier in the Sixteenth Century*, trans. and introd. S. Jennett (London, 1961), 112. Saporta was physician to Antoine de Bourbon, husband of the queen of Navarre, Jeanne. It was quite common for royal physicians and medical practitioners generally with institutional appointments to serve for only a quarter of the year. Surgeons were continually contracted to follow a great lord to the wars: for Paré's travels, see his 'Apologie et traicté contenant les voyages faicts en divers lieux', in Ambroise Paré, *Les Œuvres* (10th edn., Lyons, 1641), 777–800.

[145] Dorveaux, 'Journal', 90. Étienne-François Geoffroy, Paris master-apothecary 1694, eventually became a Paris physician ten years later. Before this he travelled to London as physician to the ambassador Tallard in 1698, and to Italy with the abbé Louvois in 1700.

home even earlier, when they were sent away to study the Latin and Greek humanities at a distant school.[146] Just like other craftsmen, however, most surgeons and apothecaries first got a chance to travel when their apprenticeship was complete and they took to the road as journeymen, a period in their life which often lasted a decade.

A typical example in the last quarter of the seventeenth century is provided by the itinerary of Jacques Chastellier, the son of a Protestant surgeon-cum-apothecary of Mouilleron in Poitou. After presumably being trained by his father, he was apprenticed in La Rochelle in 1674–5. From there he moved to Paris and spent ten months with Fourneau, one of the king's apothecaries. In his subsequent wanderings he visited Geneva, Nîmes, and Montpellier, staying in the last town for three years with the apothecary Eustache. Finally he returned home and worked for his father for a few months before spending a further three years with the widow Pache at Fontenay-le-Comte. Having reached the age of 30 and presumably having built up a clientele in Fontenay he eventually became a master there in the early 1680s.[147] A near contemporary of Chastellier, the surgeon Jean Lavieu was on the move for an even longer period. Apprenticed at Bazas in the Gironde in 1669, Lavieu then spent thirty years travelling around the country before settling down in a *bourg* (small town) outside Bordeaux. His wanderings took him all over the south of France, included a two-year stint in the hospital at Avignon, and embraced a stay in the capital.[148]

Physicians seem to have moved around principally during their training. Unless they lived in a town with a *collège de plein exercice*, a school which taught philosophy as well as the Latin and Greek humanities, they had to leave home even before they began their medical studies in order to gain the necessary propaedeutic linguistic and cognitive skills.[149] Virtually all would have had to have travelled

[146] We know very little about the pre-professional education of surgeons and apothecaries in the 16th and 17th cents. Some had received a very full humanist education: e.g. Matthieu-François Geoffroy had even studied philosophy at the Paris Collège de Navarre (Dorveaux, 'Journal', 76). For institutionalized humanities teaching in the period, see below, n. 149.

[147] Rambaud, *Pharmacie en Poitou*, 166–7. The Montpellier apothecary was presumably David Eustache.

[148] T. Gelfand, ' "A Monarchical Profession" in the Old Regime: Surgeons, Ordinary Practitioners, and Medical Professionalization in Eighteenth-Century France', in G. L. Geison (ed.), *Professions and the French State 1700–1900* (Philadelphia, 1984), 161.

[149] By 1650 there were about 100 *collèges de plein exercice* in France teaching the humanities and philosophy. These were new institutions in the 16th cent., which replaced municipal grammar schools and the faculties of arts as the traditional site of grammar and philosophy teaching. Some were attached to the universities—such as the ten or so colleges joined to the University of Paris—but most were in non-university towns. There was also a smaller number of colleges only teaching the humanities. The old faculties were reduced to degree-giving bodies: for the development of the *collège de plein exercice* and the nature of their curriculum, see Chartier *et al.*, *Éducation en France*, chs. 5 and 6. To demonstrate that they had fulfilled the necessary propaedeutic training, candidates for the baccalaureate in medicine had to present to the faculty an MA certificate.

to attend a medical faculty. This did not necessarily mean finding digs in strange towns, for relations within the medical world were close and medical students were frequently housed with medical families. The Basel student Felix Platter, for instance, lived with the Montpellier apothecary Laurent Catalan, while the Lyons physician André Falconet entrusted his son in the capital to the care of his Paris colleague Gui Patin. The latter made sure his charge was never idle, even to the extent of forcing him to copy out textbooks.[150] How often students, especially in the seventeenth century with the expansion in teaching provision, changed their faculty, and how many in particular spent time at Paris and Montpellier is of course impossible to know given the records, but the clause in the Montpellier statutes already alluded to, waiving the time of residence, suggests mobility was not uncommon.[151] Degrees, as has been said, were frequently taken in a faculty different from the one in which a student had been prepared. Philippe Hecquet (1661–1737), for instance, who later became infamous as the leading early eighteenth-century proponent of iatromechanism in France, definitely attended the Paris Faculty from 1682–3, then took his doctorate at Reims in 1684.[152]

After graduating as bachelors at Montpellier, young physicians in the sixteenth century frequently spent several years practising in small country towns in the Midi, prior to returning to the faculty to take their doctorate. An atypical example was the Montpellier professor Laurent Joubert, who became a bachelor in 1552, but only completed his degree six years later. In the mean time he had practised at Aubenas and at Montbrison. More usual was Thomas Platter, half-brother of Felix, who, as we saw in Chapter 2, spent eighteen months at Uzès from April 1597 to October 1598.[153] In the seventeenth century the habit of intercalating between taking the two degrees probably became less common, but it remained the case that many physicians, as doctors if not as bachelors, continued to move around, at least in the early years and if they were serious about their profession or sought entry to college that demanded experience elsewhere, often learning the ropes by serving as quasi-journeymen to practising physicians.[154]

[150] F. Platter, *Beloved Son Felix*, 44 ff.; R. Fauvelle, *Les Étudiants en médecine sous le Grand Roi* (Paris, 1899), 275–8.

[151] See above, Sect. C.

[152] L. W. B. Brockliss, 'The Medico-Religious Universe of an Early Eighteenth Century Parisian Doctor: The Case of Philippe Hecquet', in R. French and A. Wear (eds.), *The Medical Revolution of the Seventeenth Century* (Cambridge, 1989), 192.

[153] Dulieu, *Médecine à Montpellier*, ii. 340: Joubert had also visited Padua in the interval; Thomas Platter, *Journal of a Younger Brother: The Life of Thomas Platter as a Medical Student at Montpellier at the Close of the Sixteenth Century*, trans. and introd. S. Jennett (London, 1963), 132–79. As a result, it was common to find quite small Midi towns well supplied with physicians. Cf. Platter's comments on the number of trained practitioners serving 100 bourgeois in the town and neighbourhood of Gignac (p. 239).

[154] Commentators in the 18th cent. spoke as if this was commonplace. See Nicolas Chambon de Montaux, *Moyens de rendre les hôpitaux plus utiles à la nation* (Paris, 1787), 223.

Nevertheless, however extensive their travels, most physicians eventually probably ended up practising in their home town, for they would be more likely to find there a guaranteed, ready-made clientele, especially if they had a medical background. Few physicians really had the choice of practising in a town with a college. In the 1650s when there may well have been 1,750 medical graduates practising in France (see Table 3*b*), there can only have been some 400 incorporated physicians (including the 100 in Paris).[155] In some cases the colleges definitely made entry difficult. Not only were stiff qualifications increasingly demanded of entrants, but the entry fee could be prohibitive. It cost 800 *livres* to gain a Paris doctorate and enter the Paris college in the mid-sixteenth century and 3,000 to 5,000 *livres* in 1700.[156] There again, most colleges did not make exorbitant fiscal demands in the period: Lyons, for instance, in the early seventeenth century only charged candidates 300 *livres*.[157] Although there may have been more subtle ways of controlling entry, numbers probably stayed low in most colleges during this period primarily because outsiders recognized the difficulty of breaking into close-knit and long-established patronage networks and preferred the easier pickings of their birthplace.[158]

Once eventually settled (and doubtless married), even in a small town, very few physicians in the seventeenth century changed their domicile. When Jean Rangeard moved to Bordeaux in 1675 he had spent the previous twenty-eight years practising physic in the little town of Pons where he had been born. He only moved because his chief client, the *maréchal* Caesar-Phoebus d'Albret, had changed his residence on becoming governor of Bordeaux.[159] A few energetic and ambitious physicians, it is true, did move to Paris in the course of their lives (Hecquet was one), but they were definitely the exception.[160]

A study of the trained practitioners in the sixteenth and seventeenth centuries, however perfunctory, reveals a closely knit world. Originating in a great many cases from a medical milieu surgeons, apothecaries, and physicians were very often blood relations. Clearly, too, despite the increasingly hierarchical organization of the trained medical community, its members were united by the

[155] On the assumption that the average number of college doctors was below 10 per college.

[156] See L. W. B. Brockliss, 'Patterns of Attendance at the University of Paris, 1400–1800', *Historical Journal*, 21/3 (1978), 530.

[157] *Journal d'un Lyonnais*, 55.

[158] How membership of colleges was actually policed in the early modern period as a whole remains a mystery. In the 18th cent., arguably in contrast to the 16th and 17th cents., the colleges were more exclusive, for the number of physicians in collegiate towns stagnated while the number of physicians overall rose considerably: see below, Ch. 8, Sect. D.

[159] Marsh's Library, Dublin, printed books L4.4.8 (3), 'Factum du procez de maître Jean Rangeard ...'; ibid., MS Z2.2.15(6), printed pamphlet entitled 'Véritable Entrée à l'aggrégation en médecine de Bordeaux de Sieur Rangeard ...' (Bordeaux, n.d.), 5.

[160] Most did not bother to become members of the Paris college. For why this was possible, see below, Ch. 5, Sect. E.

same aspirations. They lived and worked side by side, even if it was admittedly very rare, given the status hierarchy, that they could practise more than one branch of the profession at a time or even migrate from one to another. When the Paris Faculty discovered in 1598 that one of their number, Jacques d'Amboise (d. 1606), the son of an eminent Paris surgeon, had previously become a member of the corporation of Saint-Côme while a bachelor of medicine, his fellow doctors immediately ordered him to disavow his action or be expelled from the college.[161] Moreover, through the extensive mobility of journeymen-surgeons and -apothecaries and the tendency, even late in the seventeenth century, for the medical education of medical students to be located in Paris and Montpellier, members of the medical profession had relatively broad horizons. The knowledge that they acquired in the course of their training and that they transported, more often than not, back to the place of their birth, was a national, even an international, and not a provincial or local construct. Consequently the corporative medical community which had emerged by the mid-seventeenth century had a genuine national character, displayed not simply institutionally through the uniformity of its corporative organization, but organically through the lived experience of its members.

E. Intercorporate Relations: The Case of Paris

The hierarchically organized and decentralized corporative medical community which emerged in the course of the sixteenth and seventeenth centuries was inevitably prey to intercorporate tensions and quarrels. It was scarcely likely that the companies of apothecaries and surgeons would take their increasing subordination to the learned physicians lying down, while individual surgeons and apothecaries must have been frequently tempted to ignore the physicians' monopoly over medical practice in collegiate towns. Unsurprisingly, then, from the mid-sixteenth century, as the physician-dominated corporative medical community began to take shape, physicians penned a stream of pamphlets bemoaning the insubordination and temerity of members of the subordinate corps.[162] In the eyes of these pamphleteers, many surgeons and apothecaries

[161] Amboise had to swear not to practise surgery or belong to the company of Surgeons of Saint-Côme thereafter: see BFMP MS 9, fos. 42–5: minute 10 Mar. 1598; Amboise had become a doctor in 1594. Towards the end of the 17th cent. migration became a little easier; besides the case of Étienne-François Geoffroy, referred to above, n. 145, note also the migration of another Paris apothecary and member of the Académie des Sciences, Nicolas Lémery who became a graduate of Caen.

[162] For an early ex., see [Sébastien Colin], *Déclaration des abuz et tromperies que font les apoticaires, fort utile et nécessaire à ung chancun studieux et curieux de sa santé, composée par Maistre Lisset Benancio*, ed. P. Dorveaux (Paris, 1901) (1st pub. Tours, 1553). For a riposte, see P. Braillier (pseudonym of the Lyons apothecary and alchemist Bernard Palissy, *c.*1510–*c.*1590), *Déclaration*

were at best disrespectful towards their learned superiors; at worst they were no better than the plethora of empirical healers who plagued the contemporary medical scene, ignorant interlopers who practised medicine without the requisite training and to the prejudice of the public. Their complaints, moreover, were not mere idle rhetoric, however much they may have inflated the degree of boundary-breaking. Although the archival evidence is limited, it would appear that the physicians in collegiate towns often took their subordinates to court over alleged or real slights to their *amour propre*. The sixteenth and seventeenth centuries were a litigious age, and those who possessed corporative privileges were quick to go to court if they felt their rights were being transgressed. The physicians were no exception.

The degree of tension which could prevail among the three branches of the medical community is well illustrated and best documented in the case of Paris. There was always likely to be strong potential for tensions and disputes in a city as large as the capital where corporative policing was probably harder to maintain, and where, with a resident court, the demand for medical services was particularly intense. Ineluctably, then, the very full record of the public life of the physicians of the Paris Faculty of Medicine, which is contained within their copiously maintained minute-book, reveals frequent occasions when the capital's corporative medical community was at loggerheads. Although the minute-book paints a rather calm, even bland, picture of intercorporate relations much of the time, there were significant intervals of total breakdown, especially in the period 1550 to 1650.

Admittedly, *pace* the pamphleteers, there is little sign that the Paris college was worried by boundary-breaking in the field of medical practice. Only on one occasion from 1590 to 1640, for example, did the Faculty take a member of one of the subaltern medical trades to court for interloping: this was the apothecary Antoine Ollin, who was hauled before the Châtelet court for treating a Monsieur Bon without consulting a physician. Moreover, even this case was not cut and dried, for Ollin claimed that he had consulted physicians but his client would not follow the doctors' prescription.[163] However, this should not be taken

des abus et ignorances des médecins, œuvre très utile & profitable à un chacun studieux & curieux de sa santé (Lyons, 1557). Part of the bitterness informing this exchange reflected Colin's belief, a view still held by Gui Patin and others a century later, that the apothecaries were wedded to traditional Arabic remedies which had been outlawed by learned physicians who had come under the influence of the revivified Galen and Hippocrates of the Renaissance: cf. Patin's description of apothecaries as 'cuisiniers arabesques': see above, Ch. 2, Sect. E.

[163] BFMP MS 9, fos. 95–6, minutes 10 and 14 July 1599. Ollin was found guilty when Bon denounced him, in addition, for overcharging. In the period 1517–60 there were only four instances of apothecaries being accused of interloping; also in 1547 the surgeons of Saint-Côme were generally criticized for practising physic: see *Commentaires*, ed. Concasty, pp. lxviii and lxxxxix.

to mean that the surgeons and apothecaries of Paris usually stuck to their professional last. Rather, it suggests that in Paris at least members of the subordinate companies mainly practised physic among the mass of the capital's population, not among the élite who were the physicians' particular preserve.[164] Such behaviour might be deemed reprehensible and lambasted by indignant pamphleteers, but it was no threat to the physicians' income and scarcely worth pursuing through the courts.[165]

What did exercise the Paris physicians at intervals over the sixteenth and seventeenth centuries was not boundary-breaking by individual members of the subordinate companies, but snubs to their right to oversee the surgeons' and apothecaries' corporate activities. In this regard, intercorporate wrangling could be prolonged and acrimonious, although the conflict was ultimately always resolved to the physicians' satisfaction, as we shall see.

The most amicable relationship in the capital was that between the college of physicians and the community of apothecaries. From the early fourteenth century the Faculty had had the right to inspect apothecaries' shops,[166] but the hierarchical relationship between the two bodies was only properly clarified in 1536. A decree of the Parlement of that year declared that Faculty representatives would not only accompany the community's officials on their regular tours of inspection, but also be present at the examination of candidates for admission and when they presented their masterpiece. In addition, the apothecaries agreed only to accept prescriptions from Faculty-approved physicians, while the college agreed to provide lectures in pharmacy.[167] Until the final decade of the sixteenth century the accord seems to have held. Indeed, even in the dark days of the siege of Paris in the early 1590s, the Faculty continued to appoint pharmaceutical lecturers, even if it chose none for its own schools.[168] In the chaos of the final years of the Wars of Religion (1589–98), however, the apothecaries must have begun to slip their chains, for the Paris Parlement issued an edict in October 1597 reviving the Faculty's right to inspect the shops, which was followed by two subsequent decrees in November demanding the compliance of the *jurés* or

[164] For an impression of the limited social range of the physicians' clientele, see below, Ch. 5, Sect. A.

[165] For the same reason, the Paris physicians made little attempt to frustrate the activities of empirical healers outside the corporative community altogether. There were many empirics in the capital in the early 17th cent. and their existence was deplored but action was seldom taken against them: see below, Ch. 4, Sect. A.

[166] See above, Sect. B.

[167] *Arrêt*, 3 Aug. 1536. The judgement arose as a result of the abbot of Sainte-Geneviève's attempt to inspect apothecaries' shops in the part of the city under his jurisdiction. This information is provided in BFMP MS 9, fos. 1–30: *arrêts* of Parlement, 13 and 15 Nov. 1597. The text of the decree does not appear in the minute-book under 1536.

[168] Evidence from BFMP MS 8, *passim*: professors were elected at the beginning of the academic year and their appointment minuted.

officials of the company.[169] It would seem, too, from the edict of September 1598 which defined the categories of legitimate medical practitioner in the capital, that the apothecaries must have been guilty of accepting prescriptions from physicians who were neither members of the college nor part of the royal entourage.[170]

Order was, however, quickly restored once more and for the rest of the period relations were generally on an even keel, except for the 1620s. In 1621 an apothecary called Faverel was made a master without a member of faculty being present.[171] The *jurés*' insistence on their right to do this turned the incident into a full-scale legal battle that lasted for most of the decade. In the sixteenth century it would seem that the Faculty had enjoyed the right to be present at the examination of candidates, but not to take an active part in the proceedings. In March 1622 the physicians claimed much more substantial powers. Their representatives were to be allowed to interrogate candidates when they thought fit, even to the extent of interrupting the *jurés*, and once the examination was over, they were to collect the votes and personally announce the verdict. They also demanded a larger say in the concoction of the masterpiece, rejecting the apothecaries' belief that the college should simply be warned of the impending examination, and insisting instead on the right to choose the subject with the *jurés*. The apothecaries understandably opposed these demands, maintaining that traditionally the physicians' role was advisory. While accepting that candidates had been elevated to the mastership illegally, the apothecaries insisted that this was a technicality and was no affront to the rights of the physicians. In fact, the Faculty only had itself to blame for the infringement, 'since [the physicians] have not the leisure to stay five or six hours, so leave the reception [of the candidate] to the *gardes* [officials of the corps]'.[172]

The subsequent *arrêt* of the Paris Parlement must have favoured the apothecaries, for in September 1622 the Faculty decided to petition the crown in defence of its rights. Bonnart, one of the professors of pharmacy (to whom was delegated the task of representing the Faculty at the examinations), declared

[169] BFMP MS 9, fos. 1–30: *arrêts* 17 and 25 Oct.; 13 and 15 Nov. Admittedly, the fault might not have lain entirely on the apothecaries' side. In the 1550s the Faculty had been reluctant to carry out the inspection of the shops: see *Commentaires*, ed. Concasty, 471[a].

[170] BFMP MS 9, fos. 56–7: edict of Parlement, 12 Sept. This edict was primarily aimed at untrained practitioners. For the rights of the royal medical entourage, see below, Ch. 4, Sect. B.

[171] BFMP MS 11, fo. 365: minute 11 Apr. The Faculty blamed the breakdown of deference that Faverel's illegal elevation betrayed on the tolerance of their predecessors. The discovery that Faverel had been made a master illegally led to a general discussion about apothecaries and barber-surgeons who were not satisfied with practising their profession but wanted to usurp the place of the physicians: the physicians were scandalized by the breakdown in deference; they specifically did not accuse their subordinates of practising physic.

[172] BFMP MS 11, fos. 408–10: from a long report on the case, Feb. 1622.

that the provisions of the new *arrêt* on the reception of candidates could not be carried out. Consequently, he refused to accompany the *jurés* on their inspection of the apothecaries' shops, an important gesture for this was a highly public intercorporate ritual, which would immediately reveal to the capital's citizens the Faculty's displeasure.[173] The quarrel flared up again, the *jurés* declaring that if the Faculty representative failed to turn up, once time and place had been given, then they would proceed 'to the said visitation, as they have done at all times and from time immemorial'. The Faculty replied that the right to announce the time and place was the physicians' prerogative, and complained to the provost of the Châtelet that on several occasions recently the apothecaries had acted illegally in inspecting the shops without the professors.[174]

It is probable that the quarrel would have ended to the satisfaction of the physicians the following year, for the apothecaries took the initiative in approaching the Faculty over reaching an accommodation in June 1623.[175] Unfortunately, this was the very moment when the Faculty began the task of compiling a new *antidotaire* or pharmacopoeia and its pharmaceutical activities brought fresh cause for complaint.[176] The sight of the Faculty equipping its own laboratory and making drugs incensed the apothecaries, who persuaded the authorities that the physicians were invading their territory. As a result, in September 1623 the instruments and medicaments in the theatre were seized and a servant of one of the physicians in charge of compiling the pharmacopoeia imprisoned.[177] The Faculty immediately appealed to the courts in turn and used the new cause of discontent as an excuse to harden its demands. In February 1624 the physicians suggested that the subject of the masterpiece should not even be decided jointly but be the sole responsibility of the professors.

Relations had reached such an impasse by November 1625 that the Faculty blacked all examinations of candidates for membership of the company until the dispute was settled.[178] This was a clever, if drastic, tactic, for it meant that any mastership conferred in the future was of dubious legal validity. In consequence, the move eventually led to a mutually acceptable agreement, if only after three years. In September 1628 the main points at issue were permanently resolved, chiefly to the advantage of the physicians. The apothecaries agreed

[173] Ibid., fos. 412–14, 423: minutes 20 and 24 Sept. The representatives of the Faculty and the apothecaries' corps progressed round the streets from shop to shop.

[174] Ibid., fos. 424–6: undated minute (Oct. or Nov.) and minute of 12 Dec.

[175] BFMP MS 12, fo. 28: minute 23 June 1623.

[176] Eighteen physicians plus the dean were appointed to produce the *antidotaire* on 30 Jan. 1623: see BFMP MS 12, fo. 8; their first task was to find a suitable locale to experiment in the best preparation of approved drugs; the pharmaceutical theatre was opened on 2 May (fo. 26). For the pharmacopoeia, see above, Sect. C.

[177] BFMP MS 12, fo. 30: minute of 6 Sept.

[178] Ibid., fos. 66 and 134: minutes 14 Feb. 1624 and 8 Nov. 1625.

that the physicians would fix the date and time for visiting their shops. In the case of the theoretical examination of prospective masters, the Faculty's representatives were empowered to interrogate candidates, suppress questions that did not specifically relate to pharmacy, and give a ruling in cases of dispute between the *jurés* (who acted as examiners) and the candidates. If by any chance the physicians were unable to remain until the finish of the examination, they were to collect the votes and delegate an official to conclude the examination in the usual manner. The Faculty only compromised over the masterpiece. The physicians waived their (fictitious) right to choose the subject, and agreed that the official in charge and the candidate would henceforth hand the professors a description of the masterpiece and that the examination would be scheduled for a time mutually convenient.[179]

The relative harmony between the capital's physicians and apothecaries reflected the fact that they were medical partners. Apothecaries not only prepared and administered drugs, but could also perform phlebotomies, so there were few cases to which a physician was called that required the assistance of a surgeon. Not surprisingly, then, the physicians had much more problem controlling the surgeons. Not only were the surgeons less closely tied to physician-patrons, but they had much greater freedom of action anyway. Apothecaries could legally act as consultants only *in extremis*, but surgeons had an accepted monopoly over all external diseases, a term in the sixteenth and seventeenth centuries interpreted liberally, and not simply limited to setting fractures, reducing dislocations, and lancing boils and ulcers. The plague, venereal maladies, and difficult childbirth cases might be medical problems upon which physicians pontificated, but their treatment was usually left entirely to surgeons.[180] In the capital, furthermore, the possibilities for insubordination were all the greater in that there were two companies of surgeons, as we have seen.[181]

Throughout the sixteenth century the Faculty had little cause for complaint about the behaviour of the barber-surgeons. Relations between the two corporations were founded on a contract of 1506. Thereby the barber-surgeons' subordination was emphasized not just through the physicians' presence at the examination of aspirant-masters, but through the requirement that members of the company take an annual oath of obedience and that candidates for the mastership pay the Faculty a token fine. In return the Faculty promised protection and agreed to provide permanent lectures in surgery. There is no evidence

[179] Ibid., fo. 186: terms of the agreement minuted 4 Sept. 1628. Even then there was not complete unanimity. The dean of the Faculty demanded that the apothecaries signed the document, but some members of the company only wanted to take an oath to uphold it. The preparation of the masterpiece took place in the house of a designated master, called the *conducteur*.

[180] See below, Ch. 5, Sect. C, for surgeons as venereal doctors.

[181] See above, Sect. A.

before the 1590s that either side seriously reneged on the agreement.[182] Although the terms were clearly demeaning (the barber-surgeons were subjected to Faculty rule much more closely than the apothecaries were), they were an acceptable price to pay in order to frustrate the endeavours of the surgeons of Saint-Côme to restrict the barber-surgeons' activities to minor surgical operations. As late as 1588 the company of barber-surgeons was still involved in a fight for its legal existence.[183]

The surgeons of Saint-Côme, on the other hand, were a permanent thorn in the Faculty's flesh. In the sixteenth century they were subject to minimum Faculty control, for the physicians do not seem to have even had the right to be called to the examination of candidates.[184] The absence of any direct right of intervention in the surgeons' affairs might have been acceptable, had the company accepted that its art was a manual craft. This, though, it refused to do. By tradition surgeons of Saint-Côme were formally educated; they held an MA; the entrance procedures to the company mimicked those of the Faculty; and they were entitled to wear the *robe longue* (long gown) and the *bonnet carré* (mortarboard), just like learned physicians.[185] The surgeons of Saint-Côme, therefore, believed that they exercised a liberal, and hence honourable, profession and that they were the physicians' equals. They were able, moreover, to make good this claim on several occasions in the course of the sixteenth century by dint of obtaining royal letters patent supporting their pretensions. The first were granted by Francis I, thanks to the efforts of his chief surgeon Guillaume Le Vavasseur, while those of Charles IX carried the force of law because they were registered by the Paris Parlement in 1567.[186] Royal support for the elevation of the surgeons' status was obviously a great blow for the College of Physicians, but a greater humiliation was the patronage that the company received

[182] The agreement was renewed in 1577. The best introduction to the history of the relations between the physicians and both companies of surgeons (although the account is very biased) is Quesnay, *Recherches*, 117–41. The 1506 contract is given in *Commentaires*, ed. Wickersheimer, 474–8, and BFMP MS 10, fos. 372–9 (*sub* 1620). The barber-surgeons frequently did not turn up *en masse* to take the oath, and occasionally not at all; candidate-masters, however, did pay the fine: see *Commentaires*, ed. Concasty, pp. lxxxvii and esp. 473 (minute 1551).

[183] BFMP MS 8, fo. 293: minute of 14 Dec. 1588 where the Faculty agrees to support the barber-surgeons in a defamation action against the surgeons of Saint-Côme. See also *Commentaires*, ed. Concasty, pp. lxxxv–xc: it was 1551 before the barbers were confirmed in their right to be called barber-surgeons, a change of title first acknowledged by the Faculty in 1506.

[184] In an agreement of 1515 the surgeons of Saint-Côme accepted that they were 'scholars' of the Faculty of Medicine and pledged to appear annually to take an oath of loyalty; this was almost never done: see *Commentaires*, ed. Wickersheimer, p. lxxxiv; and *Commentaires*, ed. Concasty, p. lxxx.

[185] See above, Sect. A, for the traditional sartorial distinction between the physicians and their subordinates.

[186] Quesnay, *Recherches*, 180.

from the papacy during the reign of Henry III. In 1576 the community of Saint-Côme had asked the university that its members be recognized as members of the Faculty of Medicine with the right to give lectures. The king blessed the move and in 1579 the pope gave his backing to the erection of a quasi-faculty of surgery by permitting aspirant-masters to take the customary oath before the university's chancellor. Had this papal bull ever been accepted as law in France, then the surgeons of Saint-Côme would have registered a significant coup, for the pope forbade the practice of surgery in the capital to anyone who was not an MA and had not received the apostolic benediction from the chancellor. As it was, the Faculty had an ally in the Paris Parlement and the court's inspection of the bull dragged on interminably.[187]

The Faculty, then, was confronted by an ambitious and highly insubordinate foe, which made good use of the fact that its officials were not elected from its midst but royal appointees (the *chirurgiens jurés* of the Châtelet). In fact, the Faculty recorded only one real victory over the company in the sixteenth century, when a decree of Parlement of 1552 declared that no one should be admitted to the community unless the physicians had been notified and four of their number were present.[188] As this ruling remained a dead letter, however, the impotence of the faculty was only further underscored.

The situation in the first decades of the seventeenth century was even more alarming from the Faculty's point of view. In the first place, the barber-surgeons, hitherto paragons of deference, began to neglect their obligations; they failed to take the oath of loyalty, candidates did not pay the customary fine, and from time to time the physicians were not called to assist at the induction ceremony.[189] At the same time the surgeons of Saint-Côme set out to make good the rights given them in the 1579 bull, regardless of its status in law. In the first place, they succeeded in 1607 in having seven of their candidate-masters awarded the degree of doctor in surgery by the university chancellor, and when the Faculty complained, their action was upheld by the king, who insisted that the papal bull be registered.[190] Secondly, the surgeons began to offer public lec-

[187] Ibid. 182–94, 208. For the bull, see BFMP MS 9, fos. 167–71, *sub* 1608. Papal bulls could only become law in France once registered by the *parlements*. The Faculty and the barber-surgeons naturally opposed registration of the bull tooth and nail. The advocate for the surgeons of Saint-Côme was the historian Étienne Pasquier (1529–1614). It was as a result of the 1576 move by the surgeons of Saint-Côme that the Faculty reaffirmed its links with the barber-surgeons.

[188] *Arrêt* of 10 Feb. 1552, pub. in M. Félibien, *Histoire de la ville de Paris* (5 vols.; Paris, 1725), iv. 755.

[189] For the first time in 1607: BFMP MS 10, fo. 52: minute 8 Feb. There had been a doctor present, but he was the royal physician Théodore Turquet de Mayerne (1573–1655), a Protestant and Montpellier graduate, noted for his Paracelsian sympathies; he later became physician to James and Charles I of England. He was consequently on the Faculty blacklist as an ally of Duchesne: for the latter, see above, Ch. 2, Sect. D.

[190] The Faculty decided initially to appeal to the chancellor of the University directly before going to court; see minute 12 Sept. 1607: BFMP MS 9, fo. 65.

tures. The surgeons of Saint-Côme had always performed anatomies for the benefit of anyone interested (*à porte ouverte*), but there is no sign in the sixteenth century that they provided formal instruction. In the 1610s, however, much to the Faculty's dismay, several members of the college delivered courses on different aspects of the surgical art. In 1614, for instance, lectures on anatomy were given by Séverin Pineau (d. 1619), a course on bandages and surgical operations by Jean La(u)nay (d. 1641) and Jacques de Marque(s) (d. 1618 or 1622),[191] and one on osteology by Charles Guillemeau (presumably a relative of Jacques).[192]

Paradoxically, the physicians found the long-standing ambitions of the surgeons of Saint-Côme easier to thwart than the new-found independence of the barber-surgeons. Despite crown support, the surgeons of Saint-Côme were unable to establish themselves as a fifth faculty. The claim that their candidate-masters be accorded the status of university graduates was successfully quashed, when the Parlement of Paris in March 1609 found for the Faculty and confirmed the status quo,[193] while the attempt to set up public lectures also fizzled out. The college had too few members (even if many were learned); there was no endowment for lectures, except for a royal grant to Pineau and François Thévenin (d. 1638) to teach lithotomy; and there was no suitable locale.[194]

By the 1620s the Faculty seem to have regained the initiative to the extent that it could even enforce its monopoly right to demand on request the bodies of victims of public justice for dissection. According to a decree of Parlement of 1551, no institution or individual could dissect the corpse of an executed felon without the approval of the dean of the Faculty.[195] In the first decades of the seventeenth century the Faculty's right was ignored, and in 1615 the physicians

[191] There were two Jacques de Marque(s), uncle and nephew, in the corporation at this date.

[192] Details in a 1622 contract between the royal surgeon Jean de Launay (not to be confused with Jean La(u)nay), and the surgeons of Saint-Côme, given in Quesnay, *Recherches*, 488–95. In 1627 Charles Guillemeau was the king's premier surgeon, but also a graduate physician: see Louise Bourgeois, *Les Six Couches de Marie de Médicis*, ed. A. Chereau (Paris, 1875), 13. There are continual references in the Faculty minutes to these surgical lectures, beginning with a denunciation of de Marque(s) in 1612: BFMP MS 11, fos. 10–13: account of cases before the Châtelet, 7 Nov. 1612. The story can also be followed in the papers of the surgeon of Saint-Côme, Delanoue: BFMP MSS 2114–15, *passim*.

[193] BFMP MS 9, fo. 250: minute 29 Mar. 1609.

[194] The Faculty first became aware of the college's aim to establish public lectures in 1610 when the surgeons attempted to acquire the university Collège d'Inville: MS 9, fos. 283, 296: 5 and 6 Mar. 1610. In the contract of 1622 referred to in n. 192, above, De Launay endowed two lectureships to the tune of 50 *livres* each, but this was a token sum. The same document reveals the presumably *ad hominem* foundation of Louis XIII, worth 600 *livres* each. Séverin Pineau had been originally contracted by the crown to train operatives in lithotomy in 1608: see BFMP MS 2115, fo. 185. For developments in lithotomy, see above, Ch. 2, Sect. B.

[195] The *arrêt* of Parlement was repeated in Feb. 1608: for details on this and the original *arrêt* see BFMP MS 10, fos. 107–9. *Commentaires*, ed. Concasty, p. 469[a–b] (Apr. 1551) only gives a gloss of the text.

complained to Parlement that 'ordinarily individual surgeons take away the bodies of executed criminals, either by violence or force, or by virtue of some licence that they obtain by surprise'.[196] A few years later, in contrast, the system was more secure and the surgeons were finding bodies difficult to acquire without acknowledging the Faculty's right of disposal. In 1622 in desperation, a band of lackeys broke into the Faculty amphitheatre, removed the body prepared for imminent dissection, rushed with it through the streets, and handed it over to the surgeons of Saint-Côme, who had apparently advertised a public anatomy and had an audience but no corpse.[197]

The barber-surgeons' insolence, in contrast, proved uncontainable for several decades. The tension was heightened in 1613 when the barber-surgeons launched an initial attempt to amalgamate the two corporations of Paris surgeons without consulting the Faculty. A junior phalanx within the college of Saint-Côme was in agreement and letters patent were obtained from the king erecting a single company. The letters, however, were quickly revoked, for the older members of the company remained convinced that the barber-surgeons were ignorant interlopers. Indeed, according to one of their number, Jérôme Delanoue, the then incumbent syndic of the barber-surgeons, a man called Coffinet, was even illiterate.[198] Union, however, made sense for the community of Saint-Côme was small (no more than twenty-five in number).[199] More importantly, the barber-surgeons acquired a powerful backer at court in the person of the king's premier barber. The latter had originally waived any controlling interest in the affairs of the company, when he ratified the 1506 contract with the Faculty on the barbers' behalf. In the 1620s he began to claim a dormant right and encouraged disobedience to the Faculty.[200] After protracted negotiations, the premier barber's attempt to assert control over the barber-surgeons was initially stymied in 1644, when the company confirmed the contracts with the Faculty of 1506 and 1577. In 1643 the Faculty had made it clear that unless the barber-surgeons came to heel, relations between the two would be severed and the college would transfer its special protection to another group of would-be surgeons in the capital, the *étuvistes*, who looked after the city's bath-houses and springs.[201]

[196] BFMP MS 11, fo. 127: minute 23 Jan. 1615.

[197] Ibid., fos. 406–7, 418–19: minutes 7 Mar. (account of incident) and 8 June (award of damages).

[198] BFMP MS 2114, p. 117. The college's defence of its rights and eventual victory in early 1614 are discussed in pp. 106–39. This was one occasion when the community of Saint-Côme and the Faculty were officially in agreement.

[199] See BFMP MS 2115, fos. 41–2.

[200] The premier barber at this juncture claimed the right to receive all barber-surgeons as masters; the Faculty insisted that he could only receive barbers: see BFMP MS 10, 365–8: minute 11 Apr. 1621. For the original rights of the king's first barber, see above, Sect. B.

[201] Quesnay, *Recherches*, 310. Nothing is known about the organization of the *étuvistes*. Presumably they had some role in healing diseases such as dropsy where a sweating regimen was fre-

The king's premier barber, however, was to have his revenge. Eleven years later he was able to organize a successful union of the two bodies of surgeons. According to the contract of October 1655, confirmed by letters patent the following year, the new company was to be placed under the control of the king's premier barber, while candidates for admission would have to be examined according to the strict rules of the college of Saint-Côme; the Faculty's role in the company was left in the air.[202]

None the less, the royal barber's revenge proved short-lived, for the attempt to establish an independent company of barber-surgeons under his protection was quickly frustrated. The Faculty inevitably opposed the 1655 contract and in February 1660 the Paris Parlement (always the Faculty's friend) reinstated Faculty rule to all intents and purposes. The premier barber was permitted to remain in ultimate charge of the new community and receive a fee from candidate-masters,[203] but the new company had to accept the contracts of 1577 and 1644 and was forbidden to call itself a college or school. As a result, all surgeons in the capital were henceforth the Faculty's subordinates, reduced to the status of master-artisans, and forbidden to teach in public. Only members of the new company who held an MA degree were allowed to wear the *robe longue* and *bonnet carré*. All that remained of the rights of the old community of Saint-Côme was the right to demonstrate anatomy and surgical operations. In 1672 even the token tribute to the faculty was revived.[204] By then the premier barber had retired from the scene completely, for in 1668 the king had ordered him to sell his controlling interest to his premier surgeon, François Félix de Tassy.[205]

In the end, therefore, the Paris Faculty retained, even increased, its right to police the surgeons, as well as the apothecaries, of the capital. Although it had seemed, especially in the late sixteenth and early seventeenth centuries, that the Faculty must succumb before the joint assault of both pope and crown on behalf of the surgeons of Saint-Côme, the traditional medical hierarchy had been eventually reinforced, as it was in other towns where similar, if less spectacular, conflicts raged from time to time. Ultimately, the Faculty always had the Paris Parlement on its side, and the *parlements* in the sixteenth and seventeenth cen-

quently recommended: see above, Ch. 2, Sect. G. In the second half of the 15th cent. the Faculty had repaired to the *étuves* after the last thesis had been sustained for the year to feast and relax: *Commentaires*, ed. Wickersheimer, p. lxx.

[202] Quesnay, *Recherches*, 315–21.

[203] His rights were protected by a member of the company, whom he named his lieutenant: in 1660 this was Jean Mesnard (d. 1663): see Félibien, *Histoire de Paris*, v. 169.

[204] Quesnay, *Recherches*, 321–55. Initially the new company refused to take down the sign over its meeting-place which read 'Collegium MM. DD. Chirurgorum Parisiensum, Juratorum'. This was ordered by another *arrêt* of Parlement of 4 Aug. 1660: see Félibien, *Histoire de Paris*, v. 169.

[205] Verdier, *Jurisprudence de la chirurgie*, i. 22. This was part of a broader deal whereby the king's premier surgeon gained control of all communities of barber-surgeons: see above, Sect. B.

turies supported steadfastly the traditional medical hierarchy as they supported the traditional religion. These ups and downs in the relations between physicians, apothecaries, surgeons, and barber-surgeons never really even came close to disrupting the Faculty's authority over the Paris corporative medical community. There were frequent conflicts, but little likelihood of a successful challenge to the Faculty's right to set the institutional and epistemological agenda.

However, the significance of these moments of conflict should not be underplayed. Even if over the period as a whole, harmony rather than conflict between the different arms of the corporative medical community was the order of the day in Paris and other towns, the incidents of breakdown were momentous occasions in the lives of incorporated medical practitioners. Though the issues may seem at times rather petty, it is worth bearing in mind how much in terms of civic identity was invested in questions of status and precedence in public life. A member of any corporation measured his value in the wider community in terms not only of the rarity of his skills but of the relative independence and hence dignity of his corps. For physicians, moreover, attempts to challenge their powers could seem both dangerously turbulent to public order *tout court* and subversive of established forms of medical knowledge. Disputes involving subaltern medical bodies overstepping the mark were as much an epistemological question as a matter of public esteem or access to clients.

F. A Corporative Medical Community sui generis

The sixteenth and seventeenth centuries saw the development of a fully fledged corporative medical community in France, which was organized into three distinctive branches under the physicians' control, decentralized if homogeneous, and eventually confessionally closed. Ideally, the three branches should have lived together in the Trinitarian unity envisaged by the founders of the combined corps of Grenoble in 1614, who framed regulations to be 'followed by each one separately in his vocation, and by all unanimously, making up only one mystical body'.[206] However, as the Paris case reveals the reality could be very different and tensions continually occurred. Yet these tensions were also ultimately successfully contained and through intercorporate struggles physicians, surgeons, and apothecaries nearly everywhere reached a successful *modus vivendi*.

The eventual achievement of harmony within the burgeoning corporative medical community was not surprising. Although there were important areas of tension and discord embedded within the corporative community, a number of factors worked in the direction of concord. To begin with, its members shared a

[206] Cited in M. Ramsey, *Professional and Popular Medicine in France, 1770–1830: The Social World of Medical Practice* (Cambridge, 1988), 39.

common medical language, ideology, and ethics, however inadequately ingested by surgeons and apothecaries, that changed but slowly over the two centuries. The corporative community therefore largely worked within a uniform ideological context. Just as importantly, their small number in even large towns in the period must have helped to foster unity. Everywhere except Paris, they would have formed a tightly knit group who must have known each other intimately: in towns like Lyons and Bordeaux there would have been more Jesuit monks than medical practitioners. Moreover, they were usually interrelated, family ties traversing occupational boundaries: a local physician's father or uncle would often be a local surgeon or apothecary.

Physicians and apothecaries would have been particularly close, especially where apothecaries had successfully emancipated themselves from their traditional spicer links. Not only did they work together much more closely, as was earlier noted, but their professional relationship was consolidated by formal acts of sociability: it was the custom for a candidate-master to entertain his new colleagues, local physicians, and perhaps their wives to a banquet after his reception.[207] Relations between physicians and apothecaries would also have been further cemented in some cases by a mutual love of classical learning. Admittedly, apothecaries had no more need than surgeons to be highly educated in order to ply their trade: at most they needed a tincture of Latin, so they could follow physicians' prescriptions. Many, however, had had a good classical training and attended a *collège de plein exercice*. The Montpellier apothecary Laurent Catalan (d. *c.*1572), for instance, especially enjoyed the company of his lodger Felix Platter in the mid-sixteenth century because he could converse with the Basle medical student in Latin.[208] Some apothecaries, too, were bibliophiles. When the Châtellerault Protestant apothecary Pierre Berthault died in 1626 he left a library of 300 books, mainly medical, surgical, and pharmaceutical works in French.[209] At that date this was a large medical library, for most Paris physicians in the early seventeenth century, including Jean Riolan the Elder, left far fewer books than this.[210]

This is not to say that within the hierarchically organized corporative community there was also a cultural fissure running vertically that divided the physicians and apothecaries from the surgeons. Not only must there have been always many poorly or semi-educated rural or small-town apothecaries who were virtually as ignorant of the classical inheritance as their surgical counter-

[207] e.g. the case of candidate-masters at Amiens: see Coornaert, *Corporations*, 159.

[208] F. Platter, *Beloved Son Felix*, 49.

[209] Published in Rambaud, *Pharmacie en Poitou*, 722–8.

[210] See F. Lehoux, *Le Cadre de vie des médecins parisiens aux XVIe et XVIIe siècles* (Paris, 1976), 465. The largest book-owner from a study of the libraries left by 58 Parisian doctors was Gui de la Brosse, who owned 1,428.

parts,[211] but there was also a group of formidably well-educated surgeons: the Paris masters of Saint-Côme. More importantly, members of both subordinate corps, thanks to the faculties' establishment of courses in surgery and pharmacy, had the opportunity, especially in the seventeenth century, to receive some sort of formal education: more and more surgeons as well as apothecaries, therefore, would have had some experience of classroom instruction by the turn of the eighteenth century. Indeed, in the anxiety to produce better-educated subordinates enthusiastic faculty professors went frequently beyond the terms of their brief. As we saw in Chapter 2, the neo-Paracelsian Pierre Le Paulmier was in trouble in 1596 for giving pharmaceutical lectures that were too advanced for his audience,[212] but far more orthodox Paris physicians were also arraigned in the period for a similar sin. Thus, in 1612 and 1613 two official Faculty lecturers in surgery, Henri Blacnuod (d. 1614) and Simon Pietre (d. 1618) were placed in the Faculty dock for teaching physic, and Pietre was further accused of allowing his house to be used as a venue for a barber-surgeon to present a medical (i.e. non-surgical) thesis.[213]

Nevertheless, the fact that all apothecaries knew some Latin and most surgeons knew none was still significant in the context of the period. As was pointed out at the beginning of this chapter, the apothecaries traditionally had a higher status than surgeons through their association with the spicers, a much more prestigious group than the barbers. The apothecaries' Latin veneer only confirmed their superiority. Outside Paris, therefore, where the members of the select community of Saint-Côme prided themselves on their knowledge of the humanities, the surgeons came at the bottom of the corporative pecking order.

This corporative medical community, it must be stressed, was *sui generis*. All over western and central Europe some form of corporative community had developed in the course of the late Middle Ages and the sixteenth and seventeenth centuries, but the system which emerged in France was distinctive. On the one hand, it was much more extensive than that found in most other parts of northern Europe, notably the British Isles; on the other, it was more genuinely autonomous than its equally extensive counterparts in Spain and Italy, in that members of the king's medical entourage were never invested with the powers

[211] Presumably many apothecaries had merely picked up a smattering of Latin from a local *curé* or parish schoolmaster, who taught the poorer sections of the community to read and write; bizarrely, until the mid-17th cent. French children were taught to read Latin not French words: see Chartier *et al.*, *Éducation en France*, ch. iv.

[212] See above, Ch. 2, Sect. E.

[213] BFMP MS 10, fos. 378, *sub* minute for 18 Oct. 1612; MS 11, fos. 76–7, *sub* minute for 2 Nov. 1613. The presenter of the offending thesis was one Boissière and the most offensive article in the Faculty's eyes was the question 'si le muscle est instrument de l'action volontaire?'. A Montpellier professor, Jean Falcon (d. 1540), had been in trouble for teaching surgeons too much physic in the first half of the 16th cent.: see Dulieu, *Chirurgie*, 59.

of the royal *protomedico* or *protomedicato*. Even in the one region of Europe where the French system was largely replicated—the Spanish Netherlands—a major distinction remained. In the Spanish Netherlands combined communities of physicians, surgeons, and apothecaries were the norm: in France they were exceptional.[214]

By the late seventeenth century, therefore, the French corporative medical community had a much tighter grip on medical practice than virtually any other corporative medical community in Europe. Moreover, the corporative community had quite a large reach. Admittedly, in its fully fledged tripartite form, it was an urban phenomenon: there were few physicians outside the towns. Nevertheless, if there were at the very least 8,000 surgeons and probably even more apothecaries in the second half of the seventeenth century, then representatives of the corporative community, however ill-educated, must have been found in many of the country's estimated 30,000 *bourgs* and villages. On the hypothesis that only half the surgeons and apothecaries were located in towns over 2,000 inhabitants (admittedly a pure guess), then probably at least one in four rural parishes had a resident trained medical practitioner of some sort in the reign of Louis XIV.[215]

Arguably, then, in most parts of France, even if 85 per cent of the population lived in the countryside, ordinary people had access to learned medicine, albeit in a diluted form. The small number of physicians did not mean that the poor and the peasantry were totally bereft of medical care or beyond the reach of orthodox medical ideas. Indeed, as Chapter 4 will show, the sick in sixteenth- and seventeenth-century France were actually spoilt for choice. The present chapter has looked at the core of the medical system. The core was surrounded by a vast penumbra of unqualified healers, working in both town and country, who had no formal connection with the corporative community at all. If surgeons and apothecaries were inevitably forced to practise as physicians in places where graduate doctors were absent, they could at least claim to have received treatment in one branch of the medical art and had probably watched physicians at work: as general practitioners they belonged to the outer ring of the inner core. In contrast, unqualified healers, although often sharing in the medical ideology of trained practitioners and aping their style of practice, could rarely make such claims. The medical penumbra, as compared with the medical core, was unstructured, ill-defined, and unstable, embracing full- and part-time healers, clerics as well as laymen, and women as well as men. Ironically, however, and

[214] For the corporative medical community in other parts of Europe, see above, Introd., Sect. B.

[215] On the assumption that there was a minimum of 16,000 surgeons and apothecaries in the second half of the 17th cent., that 8,000 lived in villages, and there was only 1 trained medical practitioner per village.

much to the learned physicians' disgust, high-profile untrained healers were often a privileged and protected species. Thanks to the system of royal licensing, a well-connected quack could be legally entitled to practise physic anywhere, even in towns with a college of physicians.

4

The Medical Penumbra

A. The Figure of the Charlatan

> As for our empirics, these are normally ignorant monks tired of their garb, artisans, valets, Carmes Déchaussées who don't know where to lay their head, bankrupts, ruined or distrained folk, fugitives, upstarts—at very least individuals lacking studies, principles, and character.[1]

'Empirics' or (the increasingly popular term) 'charlatans' were individuals who lacked the formal qualifications or certification which acted as passport into the corporative world of the orthodox medical community which has been our focus in this study thus far. They were normally portrayed, as in this jaunty characterization of the species by Jean Bernier, physician-in-ordinary to the dowager duchess of Orléans, as ubiquitous, ignorant, dirty, un- or ill-educated, socially *déclassé*, and morally suspect—quite the opposite, in fact, of the physicians' self-image as possessors of 'studies, principles, and character'.

Furetière's *Dictionnaire universel* in 1694 defined charlatan as 'false physician who mounts a theatre in a public square to sell theriac and other drugs and who brings people together by tricks and clowning so as to be able to sell more'.[2] This image of the fairground quack with his antidote against poisoning had by the late sixteenth century become the current conception of what the empiric or charlatan was. The two terms overlapped with that of 'operator', the untrustworthy quack defined in Furetière's Dictionary as an 'empirical physician who sells his drugs and remedies in public and on a stage, who announces his dwelling and his science by broadsheets and notes which he distributes'.[3]

[1] Jean Bernier, *Histoire cronologique* [*sic*] *de la médecine et des médecins où il est traité de l'origine, du progrès, & de tout ce qui apartient* [*sic*] *à cette science* ... (2nd edn., Paris, 1695), 294. See also two other outstanding contemporary texts on the charlatan: André du Breil, *Police de l'art et science de médecine* (Paris, 1580); and Thomas Sonnet de Courval, *Satyre contre les charlatans et les pseudo-médecins empyriques* (Paris, 1610). More generally, cf. H. Sulblé, *Quelques charlatans célèbres du XVIIe siècle* (Toulouse, 1922); and A. K. Lingo, 'Empirics and Charlatans in Early Modern France: The Genesis of the Classification of the "Other" in Medical Practice', *Journal of Social History*, 19 (1986), 583–604. We thank David Gentilcore for allowing us to see his then unpublished paper, ' "Sole Secret of the *Orviétan*": Charlatans and Medical Secrets in Early Modern Italy'. On the Carmes Déchaussées (Discalced Carmelites), see below, 258.

[2] (The Hague, 1690), art. 'charlatan'. [3] Ibid., art. 'empirique'.

We have more than Rabelais—whose Gargantua 'went to see jugglers, tumblers, mountebanks and quacksalvers and considered their miming, their shifts, their somersaults and smooth tongue'[4]—to show us that such larger-than-life figures did exist in early modern France. The Italian Hieronimo di Bolonia is a good example of the genre. He set himself up in the outer courtyard of the Paris Parlement in June 1601. According to the diarist Pierre de l'Estoile, Hieronimo used stones, unguents, and herbs to cure toothache and migraines, but also had 'a certain oil which within a day cured a number of wounds, as he himself demonstrated by experimenting on his own person'. Having cured himself from a self-inflicted blow with a sword, he invited volunteers from the crowd to suffer the same fate in order to dispel the suspicions of the incredulous. Needless to say a Burgundian lackey stepped forward, was wounded and cured in turn. Hieronimo's business flourished, especially as his analgesics also relieved gout, until the Paris college had him removed. Undeterred, he retired to a house behind the Hôtel de Bourgogne and continued practising to a swarm of clients.[5] (The latter location, home of one of the city's early theatre troupes, was a not-inappropriate location: a good deal of charlatanism was closer to burlesque farce and the *commedia dell'arte* than to faculty medicine.)

Foreigners like Hieronimo were routinely disdained—those from Italy (famous, claimed one source, for exporting poisoners, musicians, acrobats, astrologers, actors, bankers, *condottieri*, and machiavellian politicians as well as charlatans)[6] most of all. All charlatans, however, came off poorly. Practitioners of a kind of anti-medicine, they embodied a negative image of what the physician working within the incorporated medical community thought about himself. Where the orthodox physician prized stability and enracination within a static social hierarchy, the charlatan was mobile, itinerant, often foreign, and always on the make; where the physician prided himself on social solidity, the charlatan was frequently, it was held, the travelling companion of actors and fairground freaks, vagabonds, whore-chasers, and gamblers;[7] where the physician wore a sober black robe, the charlatan came in exotic, multi-coloured, betasselled dress; where the physician was grounded in book-learning and print culture, the charlatan, with his spiel and selling techniques, was part of oral culture (the very

[4] Rabelais, *Gargantua*, ch. 24. We have used *The Works of Rabelais*, Eng. trans. by Urquhart and Mottet (London, n.d.), 80.

[5] Pierre de L'Estoile, *Journal pour le règne de Henri IV*, ii. *1601–1609* ed. A. Martin (Paris, 1958), 30–1. There is a less flattering account of Hieronimo's activities in Sonnet, *Satyre contre les Charlatans*, 101–11. Gentilcore avers that this figure is identical with Girolamo (or Hiero-nimo) Ferranti, the Neapolitan showman responsible for originating orviétan. See too below, Sect. B.

[6] De Vigneul-Marville, *Mélanges d'histoire et de littérature* (2 vols.; Rouen, 1699–1700), i. 220.

[7] A particularly succinct physician's account of the *pseudomedicus* is given in an oration delivered by the Caen professor in 1602: see W. Frijhoff 'Le Médecin selon Jacques Cahaignes (1548–1617)', *Lias*, 10 (1983), 201 (transcription of text).

word 'charlatan' may have derived from the Italian word *ciarlare*, 'to chatter');[8] where the physician was part of learned culture, the charlatan lay closer to the culture of the streets and market-place; where the physician was an erudite all-rounder of science, the charlatan normally proffered just a couple of panacea-like remedies; where the physician was cautious and treated privately in a face-to-face setting, the charlatan performed in public and whipped up a carnivalesque atmosphere, often accompanying his act with tumbling, acrobatics, tightrope-walking, and live snake shows; where the physician preached sobriety, the charlatan embodied a world of ostentation, dissembling, and the arts of superficial appearances, often selling cosmetics as well as medical remedies. Though both sold their skills and expertise, the physician, in his eyes, did so according to a moral economy of social justice, while with the charlatan the aim was the naked pursuit of wealth and the touchstone 'Caveat emptor'.[9]

The capital, it may be assumed, had long been awash with unlicensed medical practitioners—if few were perhaps as colourful as Hieronimo.[10] A detailed analysis of the Faculty minute-book in the period from 1590 to 1640, however, reveals only a handful of charlatans taken to court for breaching the physicians' legal monopoly—and Hieronimo was not even amongst them.[11] Presumably the task was not worth the candle. Even were a judgement given in the Faculty's favour it would have been hard to enforce. Then again the paucity of indictments may also reflect the fact that physicians and charlatans tended to have rather different clienteles and modes of practice, as we shall see below.[12] By and large, street figures like Hieronimo were not physicians' economic competitors. Significantly the interlopers who were indicted tended to be practising at court among the élite—like the abbé Gabriel de Castaigne; Hieronimo served the *menu peuple*.[13] In general, out-and-out charlatans were despised and caricatured in the ways we have shown not because they posed a threat to the corporative community's livelihood so much as because they represented an affront to moral and social order.

In practice, members of the Paris Faculty of Medicine deployed this colourful blueprint of the charlatan as a means of denigrating any medical practitioner who

[8] The origins of the word are disputed. It seems likely that the French word derived from an Italian analogue, current since the mid-15th cent., denoting either an individual originating in Cereto (a known haunt of charlatans), or possibly a noun from the Italian *ciarlare*, to chatter. Contemporary sources sometimes ascribed it to the Latin *circulator*—someone who moves around.

[9] Besides the works cited above, n. 1, see too C. Clark, ' "The onely-languag'd men of all the world": Rabelais and the Art of the Mountebank', *Modern Language Review*, 74 (1979), 538–52.

[10] Cf. P. Kibre, 'The Faculty of Medicine at Paris, Charlatanism and Unlicensed Medical Practices in the Later Middle Ages', *Bulletin of the History of Medicine*, 27 (1953), 1–20.

[11] BFMP MS 8–12. [12] See below, Ch. 5, Sect. A.

[13] For Castaigne see above, Ch. 2, pp. 124–5.

seemed to threaten their epistemological, corporative, or moral standing. In the mouth of a Parisian physician, the term served as a smearing implement rather than denoting any precise sociological constituency. The range of those who could thus be tarred with the charlatanesque brush was extensive. Surgeons, apothecaries, or any other type of practitioner who failed to acknowledge the Faculty's corporative precedence and ideological hegemony drew the ire of the Parisian doctors, including sundry Faculty-trained Paracelsians, while even orthodox physicians from the provinces were regarded with contemptuous and xenophobic disdain. Doctors from small provincial faculties, who gathered in Paris, Bernier stated, 'like robbers in a wood', were thought irredeemably beyond the pale because of the deficiencies of their training. They did include some rum characters, such as Rainsant, a doctor from Reims, who it was alleged treated hernias by cutting off a testicle and throwing it to his dog to eat.[14] Yet the outsiders whom members of the Paris faculty attacked were not always such on-the-make oddballs as this. Opprobrium was also vented against someone like the Montpellier graduate and court physician Théodore Turquet de Mayerne (1573–1655), who became personal physician to James I and Charles I of England after leaving Paris. Similarly, Jean-Adrien Helvétius (*c.*1661–1727), court physician under Louis XIV, was ceaselessly denounced in Paris as a charlatan, despite the fact that his training had been impeccably correct by Dutch standards and that he hailed from a well-established Dutch medical dynasty. Saint-Simon's comment on why Helvétius—whom he personally esteemed—was viewed so badly by the Faculty spoke volumes: 'because he was not *savant* in the manner of the physicians and their faculties, he was treated by them as an empiric'.[15]

Being '*savant* in the manner of the faculties' counted for a good deal. Pride in their position at the apex of the medical world gave physicians—doctors of the Paris Faculty not least—a certain demeanour, a *gravitas*, a moral sense, which signalled their conviction of their own effortless superiority over all who presumed to speak with authority on corporeal issues of life and death. The physician prided himself on being 'roi *in partibus medicinae*' as Bernier put it ('monarch of the realm of medicine'). 'Science and morals:' he noted: 'without them, no physician.'[16] Just as the cobbler had his expertise in shoes, other types of practitioners within the medical realm—the physician's henchmen (*suppôts*), namely surgeons and apothecaries, but also midwives, accoucheurs,

[14] Bernier, *Histoire cronologique*, 293 ff. For Rainsant, Pierre Dionis, *Cours d'opérations de chirurgie démontrées au jardin royal* (Brussels, 1708), 546; and see the commentary on this text in *La France médicale*, 57 (1910), 336 f.

[15] *Mémoires*, ed. G. Trug (7 vols.; Paris, 1953–61), iii. 78. Cf. L. Lafond, *La Dynastie des Helvétius: Les Remèdes du Roi* (Paris, 1926). For Turquet, see H. Trevor-Roper, 'Medicine at the Early Stuart Court', in id., *From Counter-Reformation to Glorious Revolution* (London, 1992), 324 ff.

[16] *Histoire cronologique*, 273, 290–1.

herniotomists, oculists, bone-setters, chemists, botanists, druggists, and so on—could achieve excellence in their partial skills. However, none had the all-round vision nor the qualities of character which attached to a physician's training and his station in life, and the sense of judgement which derived from them. Jean Verdier, Enlightenment historian of the Ancien Régime world of medicine, listed disinterestedness, discretion and a sense of confidentiality, a charitable love of his fellow men, modesty, an ability to work with colleagues, a sense of propriety, and prudence as the bedrock values the physician had always had to possess.[17]

Seen from these lofty heights, the rest of the medical world looked very much the same—and very much inferior. We should, therefore, be chary of taking the Manichaean, bipolarized vision of the Faculty at its own estimation, or as a guide to what was in fact a highly diverse social reality. 'Charlatanism' was often merely the faculty's contemptuous disdain for 'someone else's medicine'—and that someone else was invariably a perceived social, intellectual, and moral inferior. The Paris Faculty, with its predilection for a text-based learning culled from the ancients, could also claim to lay down the epistemological law, to speak with authority about medical matters partly as a result of its well-placed position within the corporative matrix of orthodox medicine which had evolved since the Middle Ages, partly because of its traditional role in the creation and dissemination of medical doctrine. Indeed through their role in the preservation and continuation of medical science, all medical faculties were extrinsically superior to the most prestigious surgical or pharmaceutical corps.

The Paris doctors attacked any practitioner who could not live up to their own exacting standards. They prided themselves on being rationalists who practised medicine according to a logical method derived from first principles ingested in the schools. Hence the empiric, whose treatment was based on personal experience rather than the authority of the book, or the guidance of the medical philosopher, was an inevitable target. When Faculty physicians denounced an individual as an empiric, they implied that his medical practice was methodless. Experience should always be, according to the Faculty, the handmaid or lackey of reason, never its master.[18] Empirics were no more than healers who relied entirely on observation in the diagnosis and cure of disease. They knew nothing of the difference between the symptoms of a disease and its internal cause, they ignored the need to proceed cautiously, and they paid no attention to the unique-

[17] *La Jurisprudence de la médecine en France* (2 vols.; Alençon, 1762–3), ii. 651 ff. For the list of 'suppôts de la médecine' see ibid. i. 299–300. Cf. H. J. Cook, ' "Good advice and a little medicine": The Professional Authority of Early Modern English Physicians', *Journal of British Studies*, 33 (1994), 1–31.

[18] In the 1640s two dissertations at the Paris Faculty were specifically devoted to this theme: see BFMP TMP, in-fo., vi, no. 888, Roland Merlet, 'Est-ne in medica ratio experientia potior?', 1641; and no. 978, J. B. Moreau, 'Estne Hippocratica medendi methodus omnium certissima, tutissima, praestantissima?', 1648.

ness of the individual temperament, dosing patients haphazardly. In consequence their medical practice was not only illegal; even if they were sincere (though that seemed unlikely for such an unprincipled crowd), they represented public danger and also—such were the stakes—epistemological anarchy.

Yet despite their mocking contempt for empirics, physicians were not of course totally opposed to the use of experiential knowledge in healing. After all, in their opinion, the successful diagnosis and cure of disease was impossible without careful note of the patient's temperament and environment. Too stark a contrast between medical philosophy and empiricism thus risked being foolish—and also out of date. As we have seen, sweeping antipathy to empiricism as a scientific method was increasingly untenable in the seventeenth century, as medicine willy-nilly came to adopt a more empirical bent. The new science had placed a serious question mark against the claims of text-based authority. The circulation of the blood could not be read in Galen (though there were some hard-bitten types who came close to claiming it could). It is thus tempting to surmise that the vociferous hostility which physicians reserved for 'charlatans' and 'empirics' in the seventeenth century sometimes hid methodological anxiety rather than pristine self-confidence.

There was a juridico-institutional dimension to the physicians' anxieties too. As we have seen, the process of incorporation of medicine was extremely uneven in geographical extent and was a highly urban phenomenon.[19] Thus the field for the practice of medicine outside or on the margins of the orthodox medical community was exceptionally large. As the period wore on, much of the population living outside towns may have been in reach of the orthodox medical community, but for most the chances of making easy contact must have been limited. Even in the urban sector, it was fairly late in the day that the incorporation process was complete. Even then royal sovereignty—within what was a self-proclaimedly absolutist state—was consistently restricted by the need to respect customary arrangements and the legally endorsed prerogatives of existing corporative bodies and by a whole raft of contextual factors: custom, inertia, routine, geographical remoteness, competing rights, and so on. When challenged in the monopolistic rights granted by the monarch, it could often take physicians a long, complex, costly, and possibly unsuccessful lawsuit in order to have those rights upheld. The corporative world of medicine found that the royal writ which underpinned their privileges was far from always dependable. Since the Middle Ages, the Parlement of Paris had, it is true, been a pretty staunch ally of the Medical Faculty. On presentation, it was generally willing—especially after 1598[20]—to go along with punishing as 'charlatans' individuals

[19] See above, Ch. 3, Sect. B.

[20] Verdier, *Jurisprudence de la médecine*, ii. 471: a largely confirmatory edict restricting Parisian practice to Paris doctors and medical personnel attached to the monarch.

who had put themselves outside the law by failing to join the local professional corporation or by extending their medical activities beyond the competence of their art (or perhaps by an overcommitment to Paracelsian remedies). Yet even the Parlement's support was not always enough. Subaltern courts within the jurisdiction of the Parlement—the Paris Châtelet court, for example—were sometimes less accommodating, as were courts outside the Parisian domain. The Parlement at Tournai in Flanders upheld the right of an innkeeper in Lille in 1698 to sell his remedy for haemorrhoids, despite the opposition of the local apothecaries, citing the public interest as a reason for overriding corporative regulations.[21] Even if in the final analysis, the king's will could prevail, in this, as in most areas of social and political life, the final analysis rarely came.

In general, the incorporated medical community's stringent definitions of irregular practice did not conform with a looser and more permissive attitude held by the legal community, especially outside the capital. Less wedded than the Paris Parlement to the Faculty's vision of their medical inferiors as so many vultures preying on society, subaltern and peripheral lawcourts were more willing to countenance the possibility that a so-called charlatan might even be construed as practising in the public good. 'The interest of the public is always preferable', opined the ideologist of absolute monarchy Jean Bodin in the late sixteenth century, 'to that of individuals.'[22] 'How many savants in medicine', mused the jurist René Choppin on another occasion in 1575, defending a woman accused of charlatanism, 'have been outdone by a simple old peasant woman who, with a single plant or herb, has found a remedy for illnesses despaired of by physicians?'[23] This argument out of utility cut ice in many courts, especially when magistrates were confronted with the nit-picking pettinesses of many legal-medical disputes. At Marseilles in the 1670s, for example, the medical world was topsy-turvy, as a result of alleged boundary-breaking between the different branches of the world of medicine. The apothecaries, habitually suspected by physicians of illegally engaging in physic, themselves accused local physicians of opening apothecaries' shops and they attacked two master-surgeons in particular, Perrache and Camoin, for administering internal remedies willy-nilly.[24] In such circumstances, it was tempting to use public interest arguments—the best interests of popular health, for example, charitable concern for the poor, the popular support which alleged charlatans

[21] Verdier, *Jurisprudence de la médecine*, 149. For what seems to be a similar case in Lille involving a woman claiming the cure of *émoroydes*, see E. Leclair, *Histoire de la chirurgie à Lille* (Lille, 1911), 5 ff.

[22] Cited in F. Olivier-Martin, *L'Absolutisme français* (Paris, 1988 edn.), 232.

[23] Cited in N. Z. Davis, *Society and Culture in Early Modern France* (Stanford, Calif., 1975), 261 n.

[24] AD Hérault 4E 20, unnumbered collection of letters on pharmacy, letter dated 12 Sept. 1679 (apothecaries of Aix to the *confrères* of Montpellier). Cf. P. Barthélemy, *Histoire des apothicaires marseillais du XIIIe siècle à la Révolution* (Toulouse, 1924), 105 ff.

enjoyed, the latter's proven track record, the deficiencies of local practitioners—to cut the Gordian knot.[25]

As this sketch of the discourse on charlatanism suggests, there is enough in the small-print of the historical record to suggest the serious limitations of the bipolarized model of medical practice in early modern France espoused by physicians—and largely endorsed by recent historians of medicine. The contrast between élite and allegedly popular medicine looks more like an ideological convenience than a key to understanding the complexities of early modern medical practice. The aim of the present analysis will be to cut against the grain of physicians' ideological self-justifications.[26] We consequently employ a methodological, and metaphorical, framework which better takes into account the manner in which the discourse on the charlatan was constructed, and which is more helpful in understanding the complexities of early modern medicine. Around the central institutional core of medical orthodoxy, which we have described in Chapters 2 and 3, there was, we suggest, a penumbra of practitioners socially or institutionally associated to a greater or lesser extent with the central core and dominated more or less loosely by the ideas of the orthodox medical community. This model works in such a way that the closer a practitioner was to the core, the more vehemently he would tend to regard those outside him as charlatans. Thus for the true-blue supporter of the Paris Faculty of Medicine just about everybody except fellow Paris doctors-regent was viewed as a charlatan, including individuals who by all other criteria lay well within the core of medical practice. By the same token, even Paracelsians—the Paris Faculty physician's nightmare—had strongly disapproving views about those even more remote from the medical core than themselves (women, monks, the unlettered, etc.) getting involved in physic: even 'charlatans' had 'charlatans' on the brain.

As we shall see, the challenge to an established medical order in which the physician was 'roi *in partibus medicinae*' was not sufficiently serious in the sixteenth and seventeenth centuries to threaten the overall institutional and epistemological primacy of the physicians in general and of the Paris Medical Faculty in particular. The physicians were very far from having everything their own way, however, and the dislike and contempt they displayed towards the medical penumbra was often heartily reciprocated.

[25] See Verdier, *Jurisprudence de la médecine* i. 108 ff. for these standard arguments.

[26] See above, Introd., for a fuller exposition of this theme. Of all discussions of medical practice in early modern Europe, we feel most in common with the views of Margaret Pelling and Charles Webster (as outlined in their article 'Medical Practitioners', in C. Webster (ed.), *Health, Medicine and Mortality in Sixteenth-Century England* (Cambridge, 1979)), where they define a 'medical practitioner' as 'any individual whose occupation is basically concerned with care of the sick' (p. 166).

B. Incorporation, Patronage, and Power

The persistent failure of the processes of incorporation to keep in check medical practice unlegitimated by the core of the corporative medical community owed much to the realities of political and social power in early modern France. Even with the monarch behind them, physicians were unable to prevent lawcourts from giving leeway to those represented as 'charlatans' and 'empirics'. Physicians might have had institutional and epistemological legitimacy within the world of medicine, but in the wider world of the élite, they cut an inferior figure against priests, soldiers, or lawyers, and consequently lacked much political clout.

The hierarchical and highly stratified character of early modern society meant that those with positions higher up the pyramids of wealth and status than medical men could outbid and prevail over those individuals and groups less favourably situated. The most consummate illustration of the point was provided by the monarch himself. The kings of France, who provided official endorsement for the claims of the corporate bodies which made up the orthodox medical community, possessed the prerogative to transcend the limits of their own royal prescriptions. The monarch could trump his own legality, so to speak, in three main ways: by personal example; by licensing practitioners outside the corporative community; and by building up a royal medical household which acted as an alternative source of legitimacy to the faculty-dominated orthodox community.

The fact, first, that the kings of France claimed the right to touch for, and heal, the king's evil (scrofula) was emblematic of the monarch's right to be the exception to his own rules. The occasions on which the monarch 'touched' became massively orchestrated publicity operations for the dynasty—one estimate claimed that some 20,000 scrofular individuals turned up in Reims for Louis XIV's coronation in 1654—and highlighted the fact that the king stood above all law, save the divine. The insouciant *hauteur* of the phrase the monarch used as he touched—'Le Roi te touche, Dieu te guérit' ('The King touches you, God heals you')—was highly eloquent in this regard.[27]

A second way in which the king demonstrated this very point was in his practice of awarding licences to practice to sundry individuals, in total disregard for corporative rank or status. Exception was the rule of the Ancien Régime polity.[28]

[27] [Oudard Coquault], 'Mémoires de Oudard Coquault, bourgeois de Reims', *Travaux de l'Académie nationale de Reims*, 52/2 (1869–70), 23. Cf. M. Bloch, *The Royal Touch: Sacred Monarchy and Scrofula in England and France* (London, 1973), 204, who suggests figures of 2,000–3,000 on average; and above, Ch. 1, pp. 73, 78.

[28] A helpful and typically acute analysis may be found in D. Richet, *La France moderne: L'Esprit des institutions* (Paris, 1973). For the royal right to override corporatism, see too Olivier-Martin, *Absolutisme français*, esp. 191 ff.

ILLUSTRATION 8. Henry IV touching for the king's evil, seventeenth century. Only converted to Catholicism from Protestantism in 1593, Henry IV (reigned 1589–1610) lost little time in exploiting the propaganda value of the ritual of thaumaturgic healing practised by French monarchs since the Middle Ages.

It was not uncharacteristic of the baroque tergiversations of the early modern state that the institution, namely the crown, which was engaged in enforcing the monopoly of medical practice through incorporation should also be the most profligate supplier of medical authorizations to practise outside the corporative framework. A case in point was one Désidério Descombes, a native of Angoulême, who in the 1620s travelled round France selling his *orviétan*. This truly and astonishingly popular composite secret remedy replaced theriac—versions of which had been preached since antiquity—as the most popular antidote against the plague (and it could allegedly cope with rabies and most forms of poisoning as well). Seemingly invented in Tuscany in the late sixteenth century, it had been brought to France in the first decade of the seventeenth century by the Italian charlatan Hieronymo Ferranti.[29] Establishing himself in Paris in 1620–3 with his own brand of the antidote, Descombes was soon found

[29] On this, and the early history of *orviétan* and *orviétan*-sellers, see Gentilcore, 'Sole Secret of the *Orviétan*'; and cf. above, Ch. 1, Sect. D.

vaunting it in court circles, and he moved closer to the world of licensed medicine by acquiring, probably venally, the title of *distillateur du roi* which allowed him to present himself throughout the kingdom; then in 1625–6 he secured a royal warrant which gave him the right to appear on Paris's Pont-Neuf, the rendezvous of charlatans, which he continued to inhabit until about 1640.[30] From the Faculty's point of view, Descombes's clients on the Pont-Neuf were welcome to him: his street practice posed little threat to their own businesses, and they only became embroiled in his case when he threatened to join the core community by practising with a Parisian physician, Jean Piètre, who was hauled over the coals by them for his enthusiasm for Descombes's *orviétan*.[31]

At one sticky moment in his career, Descombes is known to have taken refuge at the monastery of the Carmes Déchaussées in Paris who, as we shall see, were also developing their own medical trade.[32] This was one of several locations in Paris—most cities had similar spots—which retained vestigial juridical freedoms from the Middle Ages and where subsequently the royal writ did not run. The Paris faubourgs, beyond the walls, had comprised one such area, though the physical extension of the city had swallowed up most of these areas by the middle of the seventeenth century. Local guilds fought with difficulty, however, against the freedom to trade enjoyed on the property of the Knights of Malta, and that of Saint-Denis-de-la-Chartres, Saint-Jean-de-Latran, and the Temple.

The Paris Medical Faculty could, and did, represent Descombes as an out-and-out adventurer and charlatan. Yet he was more than adequately protected partly through the juridical anomaly of the Carmes Déchaussées, and (mainly) as a result of the royal warrant he had secured to sell his wares. The same was true of another figure whose name became synonymous with *orviétan* in the seventeenth century, Christophe Contugi.[33] Originally from Rome, Contugi was well settled in Paris by 1646, received a royal warrant, as *opérateur du roi*, which entitled him to manufacture and retail his drug throughout France, and in legal process he effectively liquidated his rivals. Cited in the Mazarinades, incorporated into Molière's satire, Contugi—'l'Orviétan',—died in 1681 lodged within the bosom of bourgeois comfort, a respected parishioner and a solid landowner, sporting a particule and a coat of arms. His sons all prospered

[30] On this individual, see BFMP MS 11, fos. 359–63. See too C. S. Le Paulmier, *L'Orviétan: Histoire d'une famille de charlatans du Pont-Neuf aux XVIIe et XVIIIe siècles* (Paris, 1893), 16 ff.; and P. Rambaud, *La Pharmacie en Poitou jusqu'à l'an XI* (*Bulletin et Mémoires de la Société des Antiquaires de l'Ouest*, 2nd ser. 30; Poitiers, 1906), 550–4. Cf. H. David, 'Marchands d'orviétan', *Mémoires de la Société nationale d'agriculture, sciences et arts d'Angers* (1907).

[31] BFMP MS 11, fo. 363, minute 30 Apr. 1620.

[32] P. Estachy, *Les Apothicaires des lieux privilégiés de Paris* (Strasburg, 1943), esp. 5 ff., 40.

[33] See esp. Le Paulmier, *Orviétan*, and Gentilcore, 'Sole Secret of the Orviétan', for this medical dynasty.

and married well, one even becoming a doctor of the Paris Faculty of Medicine, and the Contugi dynasty held onto its proprietary remedy well into the eighteenth century. Indeed, age gave the composition the patina of respectability: by the late seventeenth century a version was being offered in the official pharmocopoeias of Lyons and Toulouse, and its composition was being set as a practical examination by Parisian apothecaries.[34]

Royal support for court practitioners was granted extensively, particularly from the late sixteenth century onwards, and represented a third way in which the kings of France contrived to infringe their own rules of trade incorporation. There were two aspects of this phenomenon: the first concerned the rights of practice extended to medical personnel holding posts in the monarch's household; the second concerned the so-called artisans following the court (*artisans suivant la cour*). The importance of the royal court as an autonomous instance of power had grown in the Renaissance. Its increase in sheer size—some 18,000 persons were estimated to be following the person of the monarch in the 1560s, for example[35]—testified to its importance as a source of privilege. This was worrying for the Paris Faculty in that medical practitioners in the royal household were customarily permitted to practise throughout the realm—plus the fact that in the late sixteenth and early seventeenth centuries such individuals tended to propagate Paracelsian doctrines, as we have seen.[36] These practitioners thus won the much-coveted right—iterated in 1504 and subsequently reendorsed—to practise in Paris with the monarch's approval, regardless of the putative monopoly on Parisian practice by graduates of the city's own medical faculty.[37] The custom had been set when the number of medical personnel attached to the person of the king was small. But in the sixteenth and seventeenth centuries they mushroomed: there were 14 individuals in the royal medical household at the turn of the sixteenth century; it had tripled in size by 1624 (11 physicians, 6 apothecaries, 10 surgeons, 9 barbers, 4 operators, 2 bonesetters, and 1 herbalist), and went on growing.[38] Other leading court figures also

[34] M. G. Planchon, 'Notes sur l'histoire de l'orviétan et sur la confection publique de la thériaque à Paris', *Journal de pharmacie et de chimie* (1892), 24. Contugi appears in a number of Mazarinades during the Fronde—notably *Les Sanglots de l'Orviétan sur l'absence du cardinal Mazarin* and *Dialogue de Jodelet et de l'Orviatan* [*sic*] *sur les affaires de ce temps* (both Paris, 1649). 'L'Orviétan' figures in Act 2, Scene 7 of Molière's *L'Amour médecin* (1666).

[35] G. Zeller, *Les Institutions de la France au XVIe siècle* (Paris, 1987 edn.), 96.

[36] See above, Ch. 2, Sect. D.

[37] Verdier, *Jurisprudence de la médecine* i. 497, and ii. 75 ff.

[38] E. Griselle, *État de la maison du Roi Louis XIII*, and *Supplément à la maison du Roi Louis XIII* (both Paris, 1912), esp. *Supplément*, 87–8. For Louis XIV, cf. *L'Estat de la France* (Paris, 1661) (which seems not to be comprehensive). In the 16th cent., the royal household had included astrologers, but these faded out after 1600. A. Franklin, *La Vie privée d'autrefois: Les Médecins* (Paris, 1892), 81 (for Catherine de' Medici).

retained a medical establishment whose members called themselves *médecin* (or whatever) *du roi* and claimed rights of Parisian practice: Marie de Medici, Louis XIII's mother, for example, salaried 1 physician, 2 apothecaries, 3 surgeons, 1 surgeon-oculist, 2 barbers, and 1 barber-bather.[39] By 1669 the number of surgeons alone attached to members of the royal family and enjoying rights of practice in Paris had grown to 46; in 1683 there were similarly 27 privileged barbers attached to the royal family.[40] To the privilege of authorized practice could be added other perks of office: the premier physician, for example, was in 1605 made *surintendant général des eaux, bains et fontaines minérales et médicinales de France*, according him extensive rights over mineral-water spas which were endorsed by Louis XIV in 1670. By then, moreover, the royal medical household was bidding fair to become an autonomous instance of power: we have already noted how, from the late sixteenth century, the premier physician and the premier surgeon were both working to extend their power throughout France at the expense of the local autonomy of incorporated surgeons and apothecaries, and these issues came to a head in the following century.[41]

Outside the swelling ranks of the practitioners who formed the royal medical household, moreover, were the so-called *artisans suivant la cour*. The requirements of the court had long led the monarch to grant the right to practise their trades, outside the formal requirements of the guilds, to individuals who were attached to the court and even, in the days of royal itineracy, followed it. The *artisans suivant la cour* were placed under the jurisdiction of a court official, the *prévôt de l'Hôtel du Roi*. Protection included the right to open a shop in Paris, circumventing Parisian guild requirements. The number of all kinds of artisans benefiting from this privilege rose from roughly 100 at the turn of the sixteenth century to 160 in 1544 and 320 in 1606.[42] Subsequently somewhat trimmed, there were still, by the last decades of the seventeenth century, no fewer than 97 trades each with two privileged court artisans attached to them under the aegis of the Prévôté de l'Hôtel. Alongside a motley crew of vintners, glove-makers, jewellers, fishmongers, and many others, there were here to be found two court apothecaries, surgeons, and wigmakers, as well as two distillers (as Descombes

[39] Griselle, *État*, 127.

[40] AN AD XI 21: *Arrest du Conseil d'État portant Réglement du nombre des chirurgiens des Maisons royales* ..., 1 June 1669; and AN AD XI 25: *Arrest contradictoire du Conseil d'Estat du Roi*, 10 Feb. 1683.

[41] See above, Ch. 3, Sect. B; and below, Ch. 5, Sect. E. For the establishment of the premier physician as *surintendant des eaux minérales*, see L. W. B. Brockliss, 'The Development of the Spa in Seventeenth-Century France', in R. S. Porter (ed.), *The Medical History of Waters and Spas* (*Medical History*, suppl. 10; London, 1990), 34.

[42] Verdier, *Jurisprudence de la médecine*, ii. 144 ff.: at the latter date, the number included 4 surgeon-barbers and 6 apothecaries. Registers of the Prévôté containing lists of privileged artisans are located in AN V3 191–8.

became) and two operators (like Contugi)—individuals whose claims were heartily resented by the incorporated guilds and colleges.[43]

This system of parallel licensing under the royal auspices was extended in the last decades of the seventeenth century, as individuals were accorded the protection of the Prévôté de l'Hôtel for the retailing of approved medical treatments, much on the lines of Descombes and *orviétan*. In 1679, for example, the surgeon Cosme-Damien Barré was given the right to open a shop-cum-manufactory to compose medicines under the authorization of the royal premier physician Daquin. In these early days, such privileges seem to have applied particularly to new and fashionable remedies: thus Jean-Marie Regnault, *distillateur du roi* since 1685, was given privileges regarding the sale of tea and chocolate; in 1694 Jean-Baptiste-Alexandre Daumont, privileged surgeon since 1689, was given the right to retail mineral waters; while the previous year, the physician Jean Montroche was permitted to advertise his new cures for venereal disease.[44] Under a related measure, the apothecary Sébastien Matte La Faveur, who in 1670 had been appointed royal demonstrator of chemistry in the Montpellier Medical Faculty as a reward for his discovery of a 'styptic water' which had saved the lives of some 6,000 French soldiers on campaign, was given the franchise to retail his 'capillary syrup' and his version of Queen of Hungary waters.[45]

In making these various exceptions to the rules of incorporation which he was also simultaneously generating, the monarch was well within his rights. The making of the laws—and the granting of privileges—was one of the foremost attributes of royal sovereignty.[46] The motives behind their creation—like the granting of franchises to operate within the aegis of the Prévôté de l'Hôtel du Roi—were partly fiscal: the monarch derived an income from such arrangements. The late sixteenth and early seventeenth centuries were, after all, a period of chronic state indebtedness, in which the government only kept its head above the water by selling off rights and privileges, generalizing the venality of offices within its own bureaucracy, and farming out or privatizing administrative services to individuals and groups.[47] Such measures could also, moreover, be justified on the same grounds of common good as were the acts of incorporation.

Yet such practices also became an idiom to which other groups and individuals up to the very top of the political pyramid were also prone. Power

[43] AN V3 191 ff. Cf. Zeller, *Institutions de la France*, 88.

[44] AN V3 195 for all cases. [45] AN V3 194. Cf. AD Hérault C 529.

[46] As highlighted by all the commentators. Cf. R. Mousnier, *The Institutions of France under the Absolute Monarchy, 1598–1789*, Eng. trans. (London, 1979) and Richet, *France moderne, passim*.

[47] See R. Bonney, *The King's Debts: Finance and Politics, 1589–1661* (Oxford, 1981) for a good overview of an often desperate situation.

operated informally as well as formally in early modern France: the closer one was to the ruler, for example, the higher up the social hierarchy, the more authority one could command. Great magnates and dignitaries who enjoyed especial royal favour were thus often effectively immune from faculty litigiousness. Few dared even contemplate taking on, and incurring the disfavour of, the mighty Richelieu, for example. It was, significantly, as we shall see, only on the death of his patron Richelieu that the latter's protégé, the maverick Montpellier physician Théophraste Renaudot, was successfully attacked by the Paris college.[48]

The high aristocracy were also among those who possessed sufficient clout to override corporate privilege among medical practitioners. Before 1500 some three-quarters of all known physicians had been in the service of *les Grands*—kings, popes, princes, bishops, or feudal potentates—and though this figure had subsequently fallen, the protection such posts offered continued to be important.[49] The case of the notorious Roch le Baillif, who operated in the train of the influential Rohan family in the late sixteenth century, provides a good example of how *les Grands* could offer a cloak of protection against attacks from within the corporative medical community. Le Baillif, an unlicensed practitioner who originated in Falaise and was based in Normandy and Brittany, made the Paris Faculty's blood boil partly because he was not a crude and unlettered figure but was able to argue his corner in debate (despite some problems with Latin). He claimed, almost certainly erroneously, to be a doctor of medicine from Caen, but somehow or other had come into contact with Paracelsian medical ideas, become a convert, and helped to popularize chemical medical philosophy by publishing his own rather simplistic account. Unlicensed medical practice was in his case a profitable business. In the 1580s, he switched his allegiance in the Wars of Religion (temporarily) from the Rohan to the Mercœur dynasty when this looked politically opportune, in an attempt to buttress his position, and in 1589 fitted out his son with 1,000 *écus* to command a company for the Catholic League.[50] His big mistake in an otherwise charmed life had been his attempt to settle in Paris in 1578. The Paris College had immediately challenged his credentials and the Parlement ordered his interrogation by the physicians. According to his inquisitors, Le Baillif was totally discredited, displaying not only no knowledge of Latin but also an ignorance of anatomy that would have shamed a barber. Worst of all, despite his boasts, the Norman was shown up as an incompetent practitioner. The 'pike-tooth powder with holy thistle water' that he used to cure pleurisy did not work, while his treatment for cancer, which consisted of opening up the

[48] See below, Ch. 5, Sect. E.

[49] D. Jacquart, *Le Milieu médical en France du XIIe au XVe siècle* (Paris, 1981), 97. Cf. ibid. 285 ff.

[50] H. Trevor-Roper, 'The Sieur de la Rivière, Paracelsian Physician of Henri IV', in A. Debus (ed.), *Science, Medicine and Society in the Renaissance* (2 vols., London, 1972), 227–50 (esp. 229–37 on the life of Roch Le Baillif wrongly identified with La Rivière, physician to Henry IV).

tumour with a poultice of pepper and yeast, proved lethal. Despite this set-back, he continued his practice and writings.[51] His example highlighted the way in which patronage could transcend the system of medical incorporation.

C. Institutional Medicine

The all-pervasive character of privilege and patronage in the Ancien Régime polity thus stood as a powerful check on the completeness of the process of medical incorporation while also fixing some of the main lines of force along which conflict would tend to run. The legal protection consequent on endorsement or employment by the monarch and *les Grands* was a kind of oxygen of legitimacy for practitioners outside the core of the orthodox medical community. A further check on the latter's claims to legal monopoly was what we have termed institutional medicine: first, the rights of municipal and other local bodies to provide for the collective welfare of fellow-citizens in ways which included medical care; and second the growth of medical services attached to the armed forces.

From the fourteenth, but in particular from the fifteenth and sixteenth centuries, local authorities had begun to grant licences to medical personnel brought in to provide medical care or to organize sanitary measures in time of plague. The practice was furthest advanced in eastern and northern France, especially in areas of Germanic and Burgundian cultural influence, where municipal institutions had particular vitality, but regionally underurbanized areas also witnessed the same process: Bayonne in the extreme south-west hired a physician from 1481, for example, while in the Armorican west Nantes went down the same road in 1473 and Rennes in 1486.[52] In return for a salary paid for from town taxes, such individuals were normally enjoined to provide treatment gratis to the poor and the hospitalized, and to be a resort in time of plague. The conventions of municipal arrangements owed a good deal to mortality crises in general—and plague outbreaks in particular. Such moments of communal catastrophe stimulated the introduction of measures to cope with what was often perceived as a social and a biological nightmare, and where sentiments of compassion mingled uneasily with fear of the poor, as a threat to social order and as a living embodiment of contagious ills.

[51] *Vray Discours des interrogatoires faicts en la presence de Messieurs de la Cour de Parlement, par les docteurs Régents en la faculté de Médecine en l'université de Paris, à Roc[h] le Baillif, surnommé la Rivière, sur certains poincts de sa doctrine* (Paris, n.d. [1579]), esp. 37–43. This source was not used by Trevor-Roper.

[52] Cf. Verdier, *Jurisprudence de la médecine*, ii. 516–18, listing 33 towns in the Lorraine with a municipal physician. On the medieval origins, see D. Jacquart, *Milieu médical*, 131 ff. For Bayonne, J. Bombail, 'Les Ordres mendiants et les œuvres charitables à Bayonne à la fin du Moyen Âge', *Comité des travaux historiques et scientifiques: Bulletin* (1972), 571–82; for the Breton exx., A. Croix, *La Bretagne aux XVIe et XVIIe siècles: La Vie, la mort, la foi* (2 vols.; Paris, 1981), 608.

The community's security at such times was invariably compromised by the medically trained taking to heart their own best advice against plague, namely 'leave early, go far, come back late'. Towns reacted to this hole in the middle of hygienic and sanitary provision by appointing *ad hoc* 'plague surgeons', for surgeons were far more likely to be available for service than their medical betters. Only latterly were 'plague physicians' appointed to serve on the health boards (*conseils de santé*), which towns began to set up to manage plague outbreaks—and control their social effects. Such figures were to be found in Rennes in 1563 and by the 1580s and 1590s in all major cities in Brittany. By the 1640s the municipalities of Hennebont and Auray were offering an annual salary of several hundred *livres* for a town physician, though they were having difficulty in attracting candidates.[53] In 1609 the Breton community of Cap-Sizun was even allowed to fund a municipal 'operator' (local physicians would say 'quack') to attend to their health problems.[54] Besides a high salary, such individuals were usually offered the right to practise within the locality once the epidemic had finished. This municipal right to license medical practice was vigorously contested by local medical corporations—especially as some of the individuals showed themselves surprisingly long-lived: François Robion served as plague surgeon in Nantes from 1626 to 1642, Julien Rouxeau at Nantes from 1603 to 1639—in both cases during some of the most appalling outbreaks of plague in Breton history.[55]

Municipal mobilization against plague shaded into a broader concern with poor-relief organization, consequent on the decline in the fortunes of the dense medieval network of hospitals and the social and economic disorders of the sixteenth century.[56] Several thousand hospitals had been founded over the Middle Ages, and roughly the same number of leper houses were lying abandoned by 1500. Civil and foreign wars had led to the destruction or deterioration of such poor-relief institutions: large numbers had been situated in rural locations, and were vulnerable to military raiding and pillaging. Scorched-earth policies in the Hundred Years War (1328–1453) led to the destruction of many, while the sixteenth-century Italian Wars and Wars of Religion also caused many losses: when the pious Philip II of Spain besieged Saint-Quentin

[53] Croix, *Bretagne*, 496. For the *conseils de santé*, see the juridical outline in [Nicolas Toussaint Le Moyne *dit*] Des Essarts, *Dictionnaire universel de police* (8 vols.; Paris, 1786–90), iii, art. 'Contagion, Peste'. Cf. below, Ch. 6. Montpellier's experiences with plague surgeons may be followed in AM Montpellier BB 'Notaires du Consulat' no. 24. For some cases of even 'plague priests' being appointed, see M. Lucenet, *Les Grandes Pestes en France* (Paris, 1985), 19.

[54] Croix, *Bretagne*, 1337. For the term *opérateur*, see above, Sect. A.

[55] Croix, *Bretagne*, 553–4.

[56] There is an enormous literature on hospital reform. For an overview, see esp. J. Imbert, *Les Hôpitaux en droit canonique du Décret de Gratien à la sécularisation de l'Hôtel-Dieu de Paris en 1505* (Paris, 1947). For the social and economic context, see above, Ch. 1, Sect. B.

in 1557, for example, he gave orders that churches and monasteries were to be spared but that hospitals could be destroyed; the royal siege of Protestant Montpellier in 1562 led to the levelling of hospitals in the suburbs of the city.[57] Where hospitals did not disappear totally, they were reduced to a situation in which they could not fulfil their functions: many vegetated, unattended; others were put to other uses—taken over by regular orders, utilized as warehouses, metamorphosed into schools, hostels, even brothels.[58] The great medieval nursing communities also suffered from a decline: the Order of the Holy Spirit, which had serviced four hundred hospitals in France alone in the fourteenth century, had little over a dozen institutions by the late seventeenth century; the Order of Saint-Lazare, which had had a wide international network of institutions under its control, had become a cipher; while those that survived, such as the Augustinian sisters who ran the Paris Hôtel-Dieu, were in a seriously demoralized state.[59]

The demoralization of hospital nursing communities, the disappearance of many hospitals and the disaffection of others, and the progressive abandonment of leper houses provided the backdrop to important changes aimed at rationalizing poor relief within many cities in the early sixteenth century.[60] One very widespread aspect of this process was the secularization, and often partial municipalization, of hospital administration. In 1505, for example, control of the great Paris Hôtel-Dieu was taken out of the hands of the cathedral chapter of Notre-Dame and placed in the hands of a lay commission drawn from the ranks of the city's notables. The ensuing rigid division between secular business matters, which were now more clearly placed within the hands of local urban notables, and spiritual matters, to which ecclesiastical personnel attached to

[57] For the Hundred Years War, see esp. H. Denifle, *La Désolation des églises, monastères et hôpitaux en France pendant la Guerre de Cent Ans* (2 vols.; Paris, 1897); for Philip II, Damourette, 'Hôpitaux et béguignages à Saint-Quentin au Moyen Âge', *Annales agricoles de Saint-Quentin*, 2nd ser. 9 (1851), 182; for Montpellier, L. Guiraud, 'La Réforme à Montpellier', *Mémoires de la Société archéologique de Montpellier*, 2nd ser. 6–7 (1918): 6. 251 and 7. 78.

[58] For schools, etc., L. Legrand, 'Comment composer l'histoire d'un établissement hospitalier', *Revue d'histoire de l'Église de France*, 16 (1930), 179 f.; for brothels, C. Petouraud, 'Les Léproseries lyonnaises au Moyen Âge et à la Renaissance', *Cahiers d'Histoire*, 7 (1962), 425–64, and 8 (1963), 37–69; and J. Chiffoleau in *Assistance et charité* (*Cahiers de Fanjeaux*, 13; Toulouse, 1978).

[59] P. Brune, *Histoire de l'Ordre hospitalier de Saint-Esprit* (Lons-le-Saulnier, 1892); M. C. Guérin, 'Une tentative de réforme militaire et hospitalière, 1672–1693: son application en Normandie', thesis, École Nationale des Chartes, Paris, 1975 (for the Saint-Lazare order); M. Fosseyeux, *Une administration parisienne sous l'Ancien Régime: L'Hôtel-Dieu de Paris aux XVIIe et XVIIIe siècles* (Paris, 1912); and N. Z. Davis, 'Scandale à l'Hôtel-Dieu de Lyon', in *La France d'Ancien Régime: Études réunies en l'honneur de Pierre Goubert* (Paris, 1985).

[60] On these reforms and their context, see C. Jones, *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989), esp. 2 ff., 41 ff.; and R. Jutte, *Poverty and Deviance in Early Modern Europe* (Cambridge, 1994).

hospitals were confined, occurred elsewhere too.[61] This was rarely an anti-clerical movement—it had its roots in some regions in the Midi at the height of the medieval age of faith[62]—but did consecrate the greater prestige and status achieved by new urban élites. The latter were also very much to the fore in devising broad, overarching programmes for reform of poor relief which were often strongly influenced by a Christian humanism best exemplified by Juan-Luis Vives's poor-law tract *De subventione pauperum* (1526).[63] Transcending the alleged divide between Protestant and Catholic modes of poor relief, a programme of reform prevailed in a great many cities throughout Europe from Augsburg to Zurich by way of London, Paris, Nuremberg, Ypres, Madrid, Toledo, Venice, and many places besides. This programme, funded from a local tax or poor-rate, sometimes supplemented by expropriated properties of run-down charitable institutions, emphasized system and rationalization in poor-relief provision; it involved expropriating many existing hospital foundations; it endeavoured to set the poor to work; and it made a clear and rigid division between deserving and undeserving paupers, each of whom were to receive very different treatment: as Jean de Vauzelles put it in 1531, one had to distinguish between those paupers who were Christ, and those who were Barabbas.[64]

Obsolete hospitals and, in particular, leper houses were drawn into this process of rationalization, and helped fund the new poor-relief programmes in many cities. The leper hospital at Dijon in the early sixteenth century was converted into a plague hospital; that at Sélestat into a refuge for repulsive skin-disease cases; while at Marseilles, the institution was dedicated first to incurables and later to lunatics.[65] The central government too became involved in the conversion of these sites. Successive monarchs encouraged the municipalization of poor relief, and showed a particular concern to ensure that the funds of disaffected leper houses and hospitals were diverted to charitable uses. From the thirteenth century the crown had established that all hospitals which could not demonstrate their origins were to be regarded as royal foundations, and as such prone to the visit, correction, and jurisdiction of the agents of the *grand*

[61] For Paris, see esp. E. Coyèque, *L'Hôtel-Dieu de Paris au Moyen Âge* (2 vols., Paris, 1889–91), i, ch. 7. More generally, J. Imbert, *Le Droit hospitalier de l'Ancien Régime* (Paris, 1993), esp. 203 ff.

[62] Numerous exx. of this in the collection *Assistance et charité*: see esp. 111 ff., 131–2, 227, 237, 248–9, 270–1, etc.

[63] M. Bataillon, 'J. L. Vives, réformateur de la bienfaisance', *Bibliothèque d'humanisme et renaissance*, 14 (1952), 141–58; M. Fatica, 'Il "Subventione pauperum" di J. L. Vives', *Società e storia*, 15 (1982) 1–30.

[64] *Police subsidiaire de cette quasi infinie multitude des pouvres survenez à Lyon sur le Rosne, l'an mil cinq cens xxxi* (n.p., 1531).

[65] J. Garnier, 'Notice historique sur la maladière de Dijon', *Mémoires de l'Académie des Sciences, Arts et Belles-Lettres de Dijon*, 2nd ser. 2 (1852–3), 57; P. Adam, *Histoire des hospices et hôpitaux de Sélestat* (Sélestat, 1960), 73; M. Villard, 'Des hôpitaux de Marseille', *Marseille*, 122 (1980), 93–104.

aumônier, the king's personal chaplain who (like the royal first barber and premier physician) was utilizing his court position to build up a national power-base.[66] In 1612 Louis XIII established a special commission—the Chambre de la Générale Réformation des Hospitaux et Maladeries de France—with wide-ranging powers to reform hospitals and defunct leper houses, a task it performed with great gusto, particularly between 1618 and 1645 when François de La Rochefoucauld was at the helm as *grand aumônier*.[67]

Hospital rationalization and reform often accentuated the medical character of the internal service of hospitals, which had been developing unevenly since the later Middle Ages. Most medieval hospitals had had precious little purely medical focus, and were essentially multi-purpose institutions, catering for all categories of the poor and needy. The Paris Hôtel-Dieu, at least in the idealized form depicted by canon Jehan de Henry at the end of the fifteenth century, had been 'open to all the sick poor of whatever nation they might be, known and unknown, who come in this place to provision themselves, to suffer, and to be fed and lodged'.[68] This was a definition which extended to wide-ranging categories of the suffering and needy, including the aged, the infirm, the disabled, and the defenceless or abandoned child—as well as pilgrims, another favoured group. To a considerable extent, medieval hospitals were less centres of medical care than of hospitality—the etymological linkages are not fortuitous. As long as famine—along with war and plague—constituted the background noise against which most individuals lived, there would always be a place for this kind of hospitality and relief-work: many hospitals well into the eighteenth century provided what was essentially 'food therapy' for the needy who passed through their doors.[69]

Consequently, the date at which hospitals had received any, let alone regular, visits from medical personnel was surprisingly late: a physician is mentioned for the first time in hospitals at Marseilles in 1338, at La Rochelle in 1351; at Lyons in 1367; at Arles in 1408—but in Nîmes only in 1486; in Angers, Narbonne, and

[66] F. Dissard, *La Réforme des hôpitaux et maladeries au XVIIe siècle* (Paris, 1938); M. Portal, 'Le Grand Aumônier de France (jusqu'à la fin du XVIIe siècle)', *Revue de l'Assistance publique à Paris* (1954), 291–306; Le Grand, 'Comment composer l'histoire d'un établissement hospitalier', esp. 218 ff.

[67] On whom see J. Bergin, *Cardinal de la Rouchefoucauld: Leadership and Reform in the French Church* (New Haven, 1987).

[68] Cf. M. Candille, *Étude du 'Livre de vie active' de Jehan de Henry* (Paris, 1964), 29. For an overview of medieval hospitals, see M. Mollat, *The Poor in the Middle Ages: An Essay in Social History* (London, 1986); and Imbert, *Hôpitaux en droit canonique*.

[69] See above, Ch. 1, Sect. C. For the *thérapie d'alimentation*, see M. Dinges, 'L'Hôpital Saint-André de Bordeaux au XVIIe siècle: Objectifs et réalisations de l'assistance municipale', *Annales du Midi*, 99 (1987), 323; and (for the 18th cent.), C. Jones and M. Sonenscher, 'The Social Functions of the Hospital in Eighteenth-Century France: The Case of the Hôtel-Dieu of Nîmes', in Jones, *Charitable Imperative*.

Orléans in 1488; in Argentan in 1495–6.[70] In some cases, it was not until well into the sixteenth century that physicians appeared for the first time. The move towards appointing municipal physicians helped here: municipal appointees were instructed to extend their care from the local sick to those lodged in the hospitals. From the late sixteenth century visits by physicians were becoming more frequent: the 1580 regulations of the Paris Hôtel-Dieu stipulated that doctors and surgeons were to visit twice daily and this gradually became the norm for major urban hospitals containing the sick as at Chartres in 1543, Nantes in 1568, La Rochelle in 1590, Dijon in 1649, Rouen in 1655.[71] There was still a considerable discrepancy between major and minor hospitals: at mid-seventeenth century only the six major institutions, out of some forty-eight hospitals in Brittany as a whole, received regular visits from medical personnel.[72] As had been the case with plague, moreover, administrators were more likely to contract with surgeons than with physicians.

The medical dimension of hospital care was amplified by the specialization of hospitals which sometimes formed part of the municipal poor-relief reform movement. It was given added acuity by the impact of contagious disease, notably bubonic plague and syphilis.[73] Hospitals, by bitter experience, began to exclude plague cases and indeed all other contagious diseases. It was only under duress—as at Dijon where townspeople rioted in 1553 and then again in 1629 to force the Hôtel-Dieu to relax its exclusionist policy—that a hospital accepted plague victims.[74] Plague victims received special medical provisions, as we have

[70] Amarguier in *Assistance et charité*, 244–5 (Marseilles); L. Delmas, *L'Hôpital militaire d'Auffredy à La Rochelle* (La Rochelle, 1891); Mollat, *Poor in the Middle Ages*, 348 (Lyons); Giordanego in *Assistance et charité*, 203 (Arles); A. Puech, *Les Médecins d'autrefois à Nîmes* (Paris, 1879), 197; C. Port, *Inventaire sommaire des archives hospitalières d'Angers* (Angers, 1870), p. xiii; J. Caille, *Hôpitaux et charité publique à Narbonne au Moyen Âge* (Toulouse, 1978), 99; P. Bouvier, 'Études sur l'Hôtel-Dieu d'Orléans au Moyen Âge et au XVIe siècle', *Mémoires de la Société archéologique et historique de l'Orléanais*, 34 (1915); L. Duval, *Inventaire sommaire des archives départementales antérieures à 1790: Orne, Archives ecclésiastiques (tome IV)* (Alençon, 1903), 92 f. (Argentan).

[71] G. Boudon, 'Le Règlement de l'Hôtel-Dieu de Paris en 1580', *Bulletin de la Société de l'histoire de Paris et de l'Île-de-France*, 30 (1903), 137–9; Croix, *Bretagne*, 608; L. Merlet, *Inventaire sommaire des archives hospitalières de Chartres* (Chartres, 1890), 74; *Instruction pour renfermer les pauvres dans les villes et y empescher la mendicité à l'exemple des villes de Rouen, Lyon, Beauvais, Chartres et autres de ce royaume* (Rouen, 1655), 62; *Fondation, construction, œconomie et règlements des hospitaux du S. Esprit et de Nostre-Dame de la Charité en la ville de Dijon* (Dijon, 1649); L. Lallemand, *Histoire de la charité* (5 vols.; 1909–10), iv. 349 ff. (La Rochelle, Angers).

[72] Croix, *Bretagne*, 611.

[73] There had, however, been some degree of specialization by the late Middle Ages, as institutions for specific categories of the needy began to emerge (the blind, children, repentant prostitutes, etc.). Cf. Jones, *Charitable Imperative*, 32.

[74] C. Aubertin and C. Bigarne, *Esquisse historique sur les épidémies et les médecins à Beaune avant 1789* (Beaune, 1885), 28–9 (for 1553) and 65 (for 1629). The same occurred at Beaune: H. Stein, *L'Hôtel-Dieu de Beaune* (Paris, 1923), 30 ff. For exclusions on contagious diseases, see e.g. M. Le

seen. The spread of syphilis from the 1490s posed a new health challenge: where hospitals had a choice they simply opted out, excluding syphilitics. In a small number of localities, however, special hospital provision was provided for syphilitics and (as with the Paris Hôpital Saint-Louis in 1607) contagious diseases.[75]

These changes brought medical staff more into the task of examining would-be entrants for contagious disease, and their role was extended from this into prescribing medicine and acting as sanitary consultants within the institutions.[76] The more rigorous approach to the exclusion of contagious disease was probably just as important as the medical presence in keeping mortality and morbidity within the institutions under control. The little evidence we have, however, highlights only a modest achievement: death rates—40 per cent at Nantes and 30–3 per cent at Lyons in the 1530s, with roughly similar figures for a number of Breton hospitals—suggest that a higher medical profile had not as yet caused a breakthrough in hospital mortality levels.[77] Indeed, there were occasional remarks which suggested that medical personnel even made conditions worse: at Lyons in 1619, the surgeon was assailed for conducting 'experiments *per mortes* on the sick poor [which] instead of curing them will kill them or completely ruin them', and at Montpellier in 1670 surgeons were said to be 'acting like blind men cutting wood, without any knowledge of the parts of the human body'.[78]

Hospital administrators were not loath to speak out against the technical deficiencies of the medical staff working within the institutions. Over the late sixteenth and seventeenth centuries a great many hospital boards came to agreements with local medical and surgical colleges, whereby the latter provided free hospital service on a rota basis among members. This was an arrangement which respected local practitioners' monopoly of medical services, yet it

Mené, 'L'Hospitalisation à l'Hôtel-Dieu de Nantes, 1577–1579', *Enquêtes et documents*, 4 (1978), 17 (1572); J. P. Sulpice, *Histoire de l'Hôtel-Dieu de Saint-Nicolas de Compiègne* (Paris, 1970), 25 (1594); and AD Côte-d'Or: archives hospitalières de Dijon E 1–52 (1587).

[75] C. Quétel, *History of Syphilis* (Oxford, 1990), 65. For an initiative in Strasburg for venereal cases, R. Burgun, 'La Syphilis à Strasbourg aux XVe et XVIe siècles', *Études alsaciennes* (1947), 77–9. Such initiatives were more frequent in German society.

[76] e.g. C. Hohl, 'Les Épidémies et leurs conséquences sur l'organisation des hôpitaux au XVIe siècle à Paris', *Bulletin et Mémoires de la Société de l'histoire de Paris et de l'Île-de-France* (1962–3), 33–6.

[77] Le Mené, 'Hospitalisation', 14; N. Z. Davis, *Society and Culture*, 23; and, for Brittany, M. Denieul, 'L'Hôpital Saint-Yves de Rennes', typed thesis, Univ. of Rennes, 1949, pp. 99–100 and Croix, *Bretagne*, 662.

[78] A. Steyert and F. Rolle, *Inventaire sommaire des archives hospitalières antérieures à 1790, Ville de Lyon; La Charité ou Aumône générale* (5 vols.; Lyons, 1874–1908), i. 19; A. Germain, 'Les Maîtres Chirurgiens de l'École de chirurgie de Montpellier', *Mémoires de l'Académie des sciences et lettres de Montpellier (Section Lettres)* (1876–80), 539–632.

was one which was fraught with problems from the hospitals' point of view and rarely worked well.[79] Many hospital administrators came to seek ways of bypassing these arrangements with incorporated groups so as to provide better treatment. First, they continued to have recourse to itinerant irregulars for specific medical services: down to the very end of the seventeenth century the Paris Hôtel-Dieu utilized the services of the Colot family, who, it will be recalled, claimed an efficacious secret remedy in lithotomies; the Hôtel-Dieu at Troyes called in an itinerant *inciseur* in 1569 to deal with two children stricken with hernias; and in 1648 the Grenoble hospital had recourse to a passing irregular who claimed an ability to deal with an outbreak of skin disease.[80] Second, hospital administrators often appointed their own nominees, on a salary, as doctor or surgeon—asserting a right to hire and fire of which the incorporated groups profoundly disapproved.[81] Third, they sought authorization—normally from the crown—for arrangements whereby a journeyman-surgeon (and sometimes a journeyman-apothecary to boot) was allowed to accede to a mastership in his trade after normally six years of assiduous service, and without needing to fulfil the training arrangements demanded by the local college. Furiously contested by local incorporated bodies, the system of the *gagnant-maîtrise*, as it was called, had become common for all large city hospitals by the end of the seventeenth century.[82] Finally, as we shall see, hospital administrators sought to improve the strictly medical aspect of their work by bringing in communities of nursing sisters and allowing them a good deal of leeway for engaging in minor surgical and especially pharmaceutical services.[83]

A further area of growing specialization in institutionalized medicine over the same period lay in military hygiene, notably the creation of military hospitals. State investment in this domain flowed from the monarchy's build-up of a standing army—a key process in the construction of absolute monarchy. It was

[79] From a list which could be much extended, see e.g. AD Lozère E dépot Marvéjols E 10; AD Pyrénées-Atlantiques. Archives hospitalières de Bayonne E 17; AD Puy-de-Dôme L 1043 (for Riom) and Archives hospitalières de Montferrand H II (unclassified); AD Isère: archives hospitalières de Grenoble E 6–28 (esp. 1638, 1640, 1642, 1684).

[80] A. Franklin, *La Vie privée d'autrefois: Variétés chirurgicales* (Paris, 1894), 185–6; J. B. Lamouret, *Les Chirurgiens de l'Hôtel-Dieu de Troyes de 1538 à nos jours* (Troyes, 1956), 12; AD Isère: archives hospitalières de Grenoble E 6–28 (1648). For the Colot dynasty, see above, Ch. 2, Sect. B.

[81] This process of change can be followed particularly well in the Hôtel-Dieu Saint-Eloi in Montpellier: AD Hérault: Archives de l'Hôpital Général de Montpellier (antérieures à 1790) E 7, F 20, F 21; and AFMM L 49, L 52.

[82] Present in the Paris Hôtel-Dieu from 1585, the *gagnant-maîtrise* arrangement was often solidified in royal letters patent which many hospitals secured in the 17th cent. T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (Westport, Conn., 1980), 26; Verdier, *Jurisprudence particulière de la chirurgie*, ii. 370 ff. Cf. Steyert and Rolle, *Inventaire sommaire*, i. 18–19 (Lyons in 1619).

[83] See below, Ch. 11, Sect. D.

necessary to find new ideological justifications and a more accentuated focus of loyalty to the crown in order to counteract the lines of clientage and seigneurialism which had kept together the marauding bands which from the Wars of Religion through to the Fronde the great feudal lords attached to their persons. It was thus politically opportune for the monarch to pose as generous provider of aid for the sick and the disabled who served under him. It also made sound economic sense: military medical care could help trained soldiers stay battle-fit.[84] The medical and welfare services of Renaissance armies had been almost exclusively confined to the personal physicians and apothecaries whom the monarch and his nobility took on campaign with them. The great Ambroise Paré had served forty campaigns in the armies of several monarchs and grandees, and provided care for the men out of a sense of attachment to their master. Laurent Joubert, resident in Montpellier, was requisitioned for the care of the king's soldiers in 1568.[85] The practice was developing of taking a cut from wages of officers and men in order to finance a military hospital; normally civilian hospitals in battle theatres were turned over to military use. The *maréchal* de Brissac in 1551 and the duc de Guise in 1552 ordered the creation of hospitals, though it seems uncertain if they were actually obeyed.[86]

The first military hospital proper was established only in 1597 by Henry IV during the siege of Amiens, with 4 physicians, 3 master surgeons, 3 journeymen-surgeons, 5 apprentice-surgeons, and 2 apothecaries attached. The propaganda value of this hospital was not missed by the dynasty's supporters. A pamphlet of 1607 praised the Amiens establishment as 'a public hospital in which the wounded are dressed, the dead buried, the valiant rewarded, and where the disabled can not only stay but may also live well and commodiously at their ease'.[87] Similar operations were mounted in 1606 at the siege of Sedan and in 1617 at the siege of Soissons. The rhetoric of paternalistic concern for crown servants was to become a commonplace in the field of military welfare provision. The Code Michaud of 1629—a royal ordinance comprising a compendium of general decrees—stipulated that every regiment and military fortress was to be equipped with a physician and a surgeon. Though the Code was rarely followed to the letter, it does seem that after 1635, when France formally entered the Thirty Years War, regiments were hiring surgeons and spending money on

[84] On military welfare policies, see esp. J. Guillermaud (ed.), *Histoire de la médecine aux armées*, i. *De l'Antiquité à la Révolution* (Paris, 1982); J. des Cilleuls *et al.*, *Le Service de santé militaire de ses origines à nos jours* (Paris, 1961); and Jones, *Charitable Imperative*, ch. 6.

[85] For Paré, see P. Dumaître, *Ambroise Paré: Chirurgien de quatre rois de France* (Paris, 1986), which draws very heavily on Paré's own account. For Joubert, AFMM Q130.

[86] Cf. E. T. Hamy, 'Nos premiers chirurgiens d'armée', *Bulletin de la Société française d'histoire de la médecine*, 2 (1903), 267–70; and J. J. Mayonade, *La 'Maison des blessés' de Longpré-les-Amiens (1597)* (Paris, 1953), 24.

[87] *Le Chimère ou Phantosme de la mendicité* (n.p., 1607). See also BN MS FR 8133, *passim*.

medicines and drugs and more temporary hospitals were being established during the campaigning season. More systematic provision of chaplains—usually from the regular orders—showed a concomitant concern with army morale, as did the billeting on military hospitals and regiments of nursing communities such as the Brothers of Charity and the Daughters of Charity.[88]

The generalization of the system of royal intendants—crown administrative appointees with far-ranging administrative powers—both in the army and in the provinces helped limit the malversation of funds and check the inherent corruption which was the bugbear of army administration. Greater efficiency in the ministry of war under ministers Michel Le Tellier (1603–85) and his son Louvois (1641–91) acted in the same direction. By the 1670s the government had established state-run military hospitals in a number of fortress cities in the north and north-east and was moving ineluctably towards more systematic hospital provision, while it was also beginning to develop a medical arm within its burgeoning navy.[89]

Another feature of the crown's military welfare provision was concern for army veterans. The monarchy had always prided itself on generosity in this domain. Since the late Middle Ages, as well as awarding prizes and pensions to veterans, kings had used the system of the *mort-paye*—that is, the individual was appointed back-up reserve guard with minimal responsibilities in a frontier garrison—and had also imposed the obligation of receiving a veteran as a lay brother (*oblat*) in royal monasteries. An interest in further reform in this area was shown towards the end of the Wars of Religion when in 1584 Henry IV took over control of the Maison de Charité chrétienne, a charitable venture associated with Parisian apothecary and Paracelsian fellow-traveller Nicolas Houel, and targeted it for the use of 'disabled gentlemen and soldiers'. Although the project failed to prosper, in the 1630s the state began considering the use of an abandoned château at Bicêtre, near Paris, as a retirement home for army veterans.[90]

[88] For the Brothers of Charity: *Sommaire du pieux Institut des Religieux de la Charité de l'Ordre du bien-heureux Jean de Dieu* (n.p., 1656); and M. L. Fracard, 'L'Organisation hospitalière des Frères de Saint Jean de Dieu à Niort (Poitou) dans la seconde moitié du XVIIe siècle', *97e Congrès National des Sociétés Savantes (Nantes)* (Paris, 1977). For the Daughters of Charity, see (e.g. at Arras), *Saint Vincent de Paul: Correspondance, Entretiens, Documents*, ed. P. Coste (14 vols.; Paris, 1920–5), x. 685–6.

[89] Guillermaud, *Histoire de la Médecine aux armées*, 383 ff.; *Le Médecin et la mer* (Entretiens de Bichat, Paris, 1961); and P. Pluchon, *Histoire des médecins et pharmaciens de marine et des colonies* (Toulouse, 1985).

[90] G. d'Avenel, *Richelieu et la monarchie absolue* (4 vols.; Paris, 1884–90), iii. 151. For veteran welfare policies, besides the works cited above, n. 85, see M. Prévost, 'L'Assistance aux invalides de guerre avant 1670', *Revue des questions historiques*, 96 (1914), 440–70; and A. Corvisier, 'Ancien Soldats oblats, mortes-payes et mendiants dans la première moitié du XVIIe siècle', *97e Congrès National des Sociétés Savantes (Nantes)* (Paris, 1972). Cf. too J. Guiffrey, 'Nicolas Houel, apothicaire, fondateur de la Maison de charité chrestienne', *Mémoires de la Société de l'histoire de Paris et de l'Île-de-France*, 25 (1898), 179–270.

The paternalist concern of the monarchy towards army veterans overlay a very real concern for public order. Footloose demobilized and veteran soldiers were one of the most dangerous elements within early modern society, perennially flocking to the flag of rebellious grandees, and they were also prone to a life of plunder and petty larceny, and spread disease wherever they passed. A Burgundian pamphleteer in 1649 berated 'the lack of discipline' of men of war, 'large numbers of whom from all estates practise piracy on land ... They have to be fed to prevent them wandering or else, if they fall ill, spoiling and infecting the town with epidemics [*maladies populaires*].'[91] The problem such men posed became all the more serious as army size mushroomed. Thus if soldiers and veterans were to be rewarded for their pains, they also needed to be kept in order and to be kept in good health. Reform measures for veterans introduced in the last decades of the seventeenth century—notably the foundation of the Hôtel des Invalides in Paris in 1670, whose first director, appropriately enough, would be the former head of the military police force!—would form part, as we shall see, of a more generalized movement of social discipline and hygiene, a movement which reserved a key role for medical personnel.[92]

D. Medicine, the Clergy, and the Dévot *Movement*

The monopolistic aspirations of the corporative medical community were thus punctured by a number of agencies: the crown, *les Grands*, municipalities, poor-relief organizations, and so on. Its rights were similarly questioned and found wanting by the Catholic Church, which constituted one of the most powerful institutional complexes within the early modern state. The Church had numbers as well as power on its side: the clergy was perhaps 200,000 strong in the early seventeenth century, and 250,000 by the 1660s—as against a corporative medical community probably numbering less than 25,000 members.[93] As a result of reforms within the Church inaugurated in the wake of the Council of Trent (1545–61), moreover, more of the clergy was around to be accessible to their charges. The programmatic intent of the Counter-Reformation, laid down at Trent, was 'to restore ecclesiastical discipline ... and to amend the depraved conduct of the clergy'.[94] Blueprint reforms advocated at Trent gradually permeated the Gallican Church from the late sixteenth century onwards, at first

[91] *Fondation, construction, œconomie et reglements.*

[92] See below, Ch. 11, Sect. B. For the director of the Invalides, Corvisier, 'Ancien Soldats', 11.

[93] Figures: for the medical community, cf. above, Ch. 3, Sect. D; and for the clergy, R. Taveneaux, *Le Catholicisme dans la France classique, 1610–1715* (Paris, 1980), 123–5; J. Quéniart, *Les Hommes, l'Église et Dieu dans la France du XVIIIe siècle* (Paris, 1978), 298.

[94] For ecclesiastical history in this period, besides Taveneaux, *Catholicisme*, see J. Delumeau, *Catholicism from Luther to Voltaire* (London, 1977); and J. Bossy, *Christianity in the West*,

through the influence of a more dedicated higher clergy and through the influence of the new orders such as the Jesuits, the Oratorians, the Doctrinaires, the Lazarists, and so on. In time the parish clergy was reformed too, notably through the diffusion of diocesan seminaries for training secular priests, and the pluralism, absenteeism, and moral laxity commonplace before Trent went into decline. Consequently, the peasant of the most remote locality imaginable might be well beyond the reach of a physician, surgeon, or apothecary: but he or she was far more rarely devoid of the presence of a priest—and that priest was, moreover, increasingly likely to be better-trained, more obedient to his bishop, and offering a more rigorous personal and moral example to the laity and commitment to pastoral concerns. Not only towns but rural areas traditionally less within the purview of religious reform movements also received a powerful clerical imprint. Missionary orders such as the Congregation of the Mission (or Lazarists) of St Vincent de Paul (1581–1660) and the Eudites of St Jean Eudes (1601–80) prioritized rural preaching and came to supplement the efforts of the parish clergy. The numerous missions organized by the Jesuit Julien Maunoir (1606–83) in Brittany in the 1650s for example were vast multi-media extravaganzas, combining processions, bonfires of books, hell-fire sermonizing, and religious theatre, music, and visual aids to make an impact upon the imaginations of rural populations.[95]

Spiritual and physical health were major concerns within this recharged pastoral commitment of the post-Tridentine clergy: the *imitatio Christi* which was one of the master metaphors in use in refashioning the clergy comprehended the idea of Christ the healer who had cured the sick, the lame, the blind, the possessed. Vincent de Paul told his followers that the religious missionary must 'do what the Son of God did on earth—work for one's neighbour, visiting and curing the sick (and) instructing the ignorant for their salvation'.[96] This necessitated a shift in the relationship between the clergy and medical practice. As we have seen, in spite of the 1215 prohibition on ecclesiastical involvement with the spilling of blood, there always remained a smattering of priests who formally trained as physicians and even a few who practised as surgeons.[97] Members of certain regular orders gained a reputation for their surgical expertise. The medieval hospital order of the Antonines amputated for gangrenous ergotism well into the eighteenth century, and visitors to their house in Vienne could see

1400–1700 (Oxford, 1985). For the diffusion of the precepts of the Council of Trent in France on poor-relief issues, see J. Imbert, 'Les Prescriptions hospitalières du Concile de Trente et leur diffusion en France', *Revue d'histoire de l'Église de France*, 42 (1956), 5–28.

[95] Croix, *Bretagne*, esp. 1211 ff.

[96] Coste (ed.), *Saint Vincent de Paul*, ix. 15.

[97] See above, Ch. 3, Sect. A. Cf. P. Delaunay, *La Médecine et l'Église: Contribution à l'exercice médical par les clercs* (Paris, 1948), 86, 91.

mummified limbs hanging up like ex-votos.[98] The Brothers of St John of God, better known as the Brothers of Charity, who had been introduced to Paris in 1601, were installed in the Hôpital de la Charité in the Faubourg Saint-Antoine in Paris. By the reign of Louis XIV, they were to be found throughout France in twenty-seven establishments, containing over 1,000 beds. Besides an early commitment to care for the insane, and also to the practice of running dispensaries, the Brothers of Charity were especially renowned for their lithotomy techniques. At Metz, local surgeons accused them of stealing their clients, admitting the wealthy for surgery into their hospital where they should take in only paupers.[99] Just as street-corner mountebanks sometimes borrowed the rhetorical tricks of hell-fire missionaries, so other denizens of the medical penumbra imitated the Brothers of Charity. The so-called Frère Jacques—Jacques Baulot (1651–1714), who at the turn of the century won an apparently totally unjustified reputation at Louis XIV's court for lithotomy techniques—dressed up in monastic garb and passed himself off as a cleric.[100]

The seventeenth century further witnessed the emergence of members of the regular orders as serious medical practitioners working as father apothecaries in charge of the dispensaries in the convents and hospitals under the regulars' control.[101] Initially intended to serve the needs of the community or hospital patients under the aegis of a licensed physician, the regular dispensary in the seventeenth century became a semi-public institution where the laity could seek medical advice and buy cheap home-made remedies. The Parlement of Paris had inveighed against such practices in the past, but seemed powerless to prevent the emergence of a strong conventual pharmaceutical sector in the capital, whose reputation was high following the confirmation of 'Jesuits' Bark' (conchina) as an effective febrifuge.[102] The range on offer was considerable. Two Dutch visitors to Paris in 1657 found a veritable chemical laboratory, well stocked and boasting two skeletons and a pickled corpse when they visited the Petits-Augustins monastery; the Feuillants too had a sophisticated laboratory from 1637; while the Récollets boasted a herb-garden, the Jardin de santé. Father Dominique Plantier of the Jacobin order was famous for a number of concoctions, including the *eau spiritueuse de Jericho* and the *eau philosophique*

[98] H. Brabant, *Médecins, malades et maladies de la Renaissance* (Brussels, 1966), 94–5.

[99] AD Moselle: Archives hospitalières de Metz F 20. See too A. Chagny, *L'Ordre hospitalier de Saint-Jean-de-Dieu* (Lyons, 1951); and G. Russotto, *San Giovanni di Dio e il suo ordine ospedaliero* (2 vols.; Rome, 1968).

[100] For this figure, see below, Ch. 5, Sect. A.

[101] See esp. M. Fosseyeux, 'Les Apothicaireries de couvents sous l'Ancien Régime', *Revue de la Société de l'histoire de Paris et de l'Île-de-France*, 46 (1919).

[102] Cf. Verdier, *Jurisprudence de la médecine*, i. 514 ff. For 'Jesuits' Bark', see P. Delaveau, *Histoire et renouveau des plantes médicinales* (Paris, 1982), 186 ff.

d'Osiris, while the Carmes Déchaussées—erstwhile refuge of Désidério Descombes—offered an *eau souverain contre l'apopléxie et les vapeurs*.[103] Some women's convents also engaged in this practice: the Filles de Sainte-Geneviève, or Miramiones, had a well-stocked dispensary as did the mother-house of the Daughters of Charity from the 1630s and 1640s.[104]

Besides their scientific allure, these monastic houses also demonstrated sound commercial sense: the Carmes Déchaussées and the Jacobins advertised through handbills, for example. The Jesuits too—despite the warning of one of their number, Théophile Raynaud, author of an important treatise on moral theology, that 'monks who become mixed up in trade distance themselves through the concerns of the world from God's thoughts'—developed trading links across the country. The court physician Noel Vallant was supplied in drugs by the Montpellier Jesuits in 1670, for example, while in 1652 the Lyons Jesuits had despatched to Paris a *remède souverain contre la toux, la phtisie et les sérosités*.[105] The Jesuits—together with the Capucins, the Augustinians, and the Feuillants—were the worst offenders in the city of Lyons, according to the syndic of the Lyons apothecaries in 1679.[106] At the same date the bugbear of the Bordeaux apothecaries was the Minim order. A letter to the Montpellier syndic in December 1678 revealed with glee how a member of the monastery, who had been under suspicion for some time, had just been seized carrying 'a syringe containing an enema that he was carrying to a sick person in the town on the orders of a brother Minim who was the monastery's apothecary'.[107] At Dijon, the apothecaries had to take the Brothers of Mercy to court in 1672 to prevent them selling their wound ointment derived from the fat of executed prisoners.[108] The Montpellier apothecaries in 1674 tried to co-ordinate a campaign against competitors in the regular orders. In the light of the unhelpful attitude of the courts and the royal council, they even considered an appeal to the pope to order the errant priests to stick to their religious lasts.[109]

The mini-campaign organized by the Montpellier apothecaries in the late 1670s failed in its objectives, and indeed the late 1670s and 1680s saw the corporative medical community seemingly helpless to prevent the central government from giving open and enthusiastic support to a new initiative in monastic

[103] Fosseyeux, 'Apothicaireries', 42–6, 49–52.

[104] Ibid. 53 ff. For the Daughters of Charity, *Letters of Saint Louise de Marillac* (Emmitsburg, Md., 1972), letters 259, 261, 343, etc.

[105] Fosseyeux, 'Apothicaireries', 44–5, 59.

[106] AD Hérault 4E20: letter of Guillemin of Lyons to Rey of Montpellier, 10 Sept. 1679. See also the comments on the behaviour of the Lyonnais Jesuits in a letter from the Montpellier to the Bordeaux apothecaries: ibid., 13 Aug. 1678.

[107] Ibid., letter from Bordeaux, 26 Dec. 1678.

[108] M. Mével, *Les Chirurgiens dijonnais au XVIIIe siècle* (Dijon, 1901), 6.

[109] AD Hérault 4E20: letter 26 Dec. 1678 (from Bordeaux).

medicine on the part of the so-called Capucins of the Louvre. The two Capucin fathers Rousseau and Aignan claimed to have visited Egypt and returned with secret remedies from the age of the pharaohs kept alive in Coptic monasteries.[110] In 1678 Louis XIV established them in an equipped laboratory in the Louvre with an annual pension of 1,000 *livres* and though they targeted a popular audience they drew many clients from among the court aristocracy. They offered a wide range of herbal-based concoctions: snake essence (derived from snakes fed only on honey and roses), laudanum, a universal remedy for female vapours (including among its ingredients the boiled placenta of a male baby born of a primipara), and not least their *baume tranquille* in which, they claimed, there were 'as many live toads as pounds of oil'. This 'tranquil balm' enjoyed a considerable success—Aignan became known as Père Tranquille on the strength of it—and was used purportedly to good effect by the super-sensitive Madame de Sévigné.[111]

A tougher clerical attitude towards the workings of the miraculous was accompanied by a wish in some quarters to make the parish clergy assume a role in maintaining the laity's physical as well as spiritual health. Works such as Jean d'Aubry's *Le Triomphe de l'Archée, et la merveille du monde* emphasized the role of the priest as the human technician of his parishioners' spiritual and physical health, as the distributor of charities rather than an organ for healing by faith alone. Characteristically too, the Assembly of the Clergy in 1670 passed a resolution, which subsequently received royal endorsement, urging bishops to establish dispensaries of popular remedies in each parish. One pious handbook admonished parish priests that 'it is certain that by the cure of the body one can as often cure souls as with sermons and good advice'.[112]

This idea of medication as a proselytizing force was taken further, moreover, by lay religious activists, or *dévots*, whose enthusiastic support was essential in the Counter-Reformation project of the pursuit of godliness. The *dévots* (lay-men, -women, and clerics who ardently embraced the values of the Counter-Reformation) played a crucial role at every level of religious and social reform throughout the seventeenth century, aiming to produce a moral regeneration, a reformation of manners throughout society. The clandestine Company of the Holy Sacrament, the so-called Cabale des Dévots, which operated from the late

[110] François Aignan (1644–1709) was a Swiss Capucin and supposedly a medical graduate of Padua. For the episode in general, which crops up in many of the memoirs and diaries of the period, see Fosseyeux, 'Apothicaireries', 46–9; Delaunay, *La Médecine et l'Église*, 123–5. Cf. Saint-Simon, *Mémoires*, iv. 939.

[111] Cf. Aignan, *Le Prestre médecin, ou, Discours physique sur l'établissement de la médecine* (Paris, 1696), esp. 226 ff. for the *baume tranquille*; id., *L'Ancienne Médecine à la mode* (Paris, 1693); and below, Ch. 5, Sect. A.

[112] J. d'Aubry, *Le Triomphe de l'Archée et la merveille du monde, ou, La Médecine universelle et véritable* (1659; 4th edn., Paris, 1660); Verdier, *Jurisprudence de la médecine*, i. 547.

1620s down to its dissolution (as a dangerously secretive organization) in the early 1660s was the most notorious of such instruments of reform.[113] A kind of activist caucus including eminent churchmen—Vincent de Paul, Olier, Bossuet were linked with it—and powerful laymen from the old aristocracy (Conti, Nemours, Liancourt, etc.) and the high *robe* (Séguier, Noailles, Lamoignon, d'Argenson, etc.), it was behind just about every major social and religious reform. Members saw themselves as 'good angels',[114] acting to rechristianize artisanal confraternities, to check on public morals, to reform prostitutes and sexual deviants, to support educational initiatives, to engage in famine relief, to establish parish confraternities for home relief and medical care, to drive Protestants out of public life, to galvanize alms-giving, and in general to combat paganism, ignorance, and heresy. As we shall see, they also played a major role in developing the royal strategy of confining paupers, vagrants, and other 'deviants' in special 'general hospitals' (*hôpitaux généraux*).[115] Their activity, exceptionally intense in the capital, was amplified by around sixty provincial branches, and was supplemented, moreover, by similar networks of *dévots*, such as the Jesuit-inspired confraternities of Messieurs and, among women, by confraternities of Ladies of Charity.[116]

The prototype of the female charitable confraternity was the grouping of so-called Ladies of Charity established by St Vincent de Paul when he was a parish priest at Châtillon-sur-Dombes in the Lyonnais in 1617. If the Ladies aimed to medicate (*faire médeciner*) local paupers, this was part of a broader project of bringing spiritual succour and material relief (food, bouillons, blankets, medicines, second-hand clothing, and so on) to the sick poor in their homes, providing popular schooling, and also allowing women from the middling and upper rungs of local society to engage in their own spiritual edification.[117] Such Charities were established in all rural parishes in which Vincent de Paul and from 1625 his Lazarist order engaged in missionary work. The institution became fashionable in Paris too, initially through the links Vincent de Paul maintained with the social élite through his patronage by the powerful Gondi family, which provided archbishops of Paris from 1569 to 1660. Women from the highest echelons of court and Parisian society—whose husbands and fathers were often

[113] A. Tallon, *La Compagnie du Saint Sacrement, 1629–1667* (Paris, 1990); E. Chill, 'Religion and Mendicity in Seventeenth-Century France', *International Review of Social History*, 7 (1962), 400–25; R. Allier, *Le Cabale des dévots* (Paris, 1902). Cf. L. Châtellier, *The Europe of the Devout* (Cambridge, 1989).

[114] Tallon, *Compagnie*, 114 (citing the Marseilles branch).

[115] See below, Ch. 11, Sect. B.

[116] For a provincial chapter, see J. P. Gutton, *La Société et les pauvres: L'Exemple de la généralité de Lyon (1534–1789)* (Paris, 1974).

[117] P. Coste, *Monsieur Vincent et les Dames de Charité* (Paris, 1917); *Saint Vincent de Paul*, ed. Coste, xiii. 425, and xiv. 126. Cf. R. Chalumeau, 'L'Assistance aux pauvres malades au XVIIe siècle', *Dix-Septième siècle*, 90–1 (1971), 75–86.

serving in the Company of the Holy Sacrament—joined in parish charities along Vincentian lines. A vogue in Paris, their diffusion within provincial cities often followed the lines of filiation of the Company of the Holy Sacrament, which fully supported such bodies.[118]

In rural areas, it became common to establish charitable confraternities within seigneuries. The idea of charity towards vassals as a seigneurial duty was well established—Gilles de Gouberville (1522–78), a Norman petty noble, for example, was well acquainted with popular medical treatises and acted as physician to his peasants; the humanist Montaigne (1533–92) had a similarly protective approach to his fellow country-dwellers. Though often mocked from within the orthodox medical community, the seigneurial ideal was progressively refurbished from the middle decades of the seventeenth century in the wake of post-Tridentine piety. The duc de Luynes's booklet 'Instruction for Teaching Those who have Lands of which They are Seigneurs What They May Do for the Glory of God and the Relief of their Neighbour', restated the responsibilities of the seigneur in a way which merged archaism with the more emollient language of post-Tridentine piety. The ideology of pious seigneurialism was lent some poignancy—some might have said hypocrisy—by the fact that many regions were also witnessing at the same time a 'seigneurial reaction', a move by seigneurs to increase the income from their estates at the expense of their peasants' rights.[119] Much, however, could be achieved. Louis XIV's chancellor and minister Pontchartrain, for example, engaged in extremely wide-ranging charitable activity on his estates: building and redecorating churches, ensuring ecclesiastical personnel were properly looked after, constructing and equipping hospitals, establishing schoolteachers, and creating and funding parish charities. His principal aide in his seigneurial good works was his wife.[120] The seigneur's wife and daughters had habitually been seen as the soul of this tradition of *noblesse oblige*. The *politique* historian and antiquarian Jacques-Auguste de Thou claimed he owed his life to one such Lady Bountiful, the aristocratic Gabrielle de Mareuil, who had nursed him through what was diagnosed by graduate physicians as a terminal fever in 1565 when he was aged 11.[121]

[118] R. Chantelauze, *Vincent de Paul et les Gondi* (Paris, 1882); and Jones, *Charitable Imperative*, esp. 97–9.

[119] Luynes, *Instructions pour apprendre à ceux qui ont des terres dont ils sont seigneurs ce qu'ils peuvent faire pour la gloire de Dieu et le soulagement du prochain* (Paris, 1658). For the seigneurial reaction, cf. J. Jacquart, 'La Dégradation du revenu paysan', in G. Duby and A. Wallon (eds.), *Histoire de la France rurale*, ii. *1340–1789* (Paris, 1975), 254 ff.

[120] P. Berger, 'Rural Charity in Late Seventeenth-Century France: The Pontchartrain Case', *French Historical Studies*, 10 (1978), 393–415. The Pontchartrains' support for the Daughters of Charity nursing order is reflected in a host of the community's establishment contracts: AN S6160–80.

[121] 'Mémoires de Jacques-Auguste de Thou depuis 1553 jusqu'en 1601', in J. A. C. Buchon (ed.), *Choix de chroniques et mémoires sur l'histoire de France* (Paris, 1836), 565.

There was indeed a strong gendered element within this *dévot* overhaul of charity aimed at reforming public morals and piety. While men could and indeed did engage in all forms of charitable endeavour, it seemed divinely ordained that women should restrict themselves to activities of a softer and more gentle sort. They were normally only called on to cope with assisting the 'deserving poor': parish confraternities in Paris and elsewhere conducted a moral policing to ensure aid did not fall into the hands of beggars, vagrants, blasphemers, the work-shy, and those of scandalous life. These 'deviant' groups were the quarry of the (male) police forces and from the 1650s the Parisian Hôpital Général, the laboratory for social discipline presided over by a board of male *dévots*.[122] As Louise de Marillac had noted when the Hôpital Général had first been mooted, 'if this work is regarded as political, it seems that men must undertake it; but if it is considered a work of charity, women can undertake it in the manner that they have undertaken other great exercises that God has approved'.[123] Charitable activity was thus gendered in a way which kept women from the most public aspects of these endeavours. A similar pattern was evident in regard to women's role in medicine more generally.

E. The Medical Role of Women

The orthodox medical community was essentially a male domain, and the closer one got to the institutional core of medical orthodoxy, the less likely it was to find women present in any capacity. The processes of formal training for medicine, surgery, and the apothecary's art had been denied women since the late Middle Ages—both earlier and more completely than in a number of other European states.[124] Women were specifically excluded from university qualification in France from the fourteenth century. They could be thrown into prison for secretly engaging in medicine: there were cases in Paris in 1507 and Toulouse in 1558. In 1484 Charles VIII had forbidden women from practising as surgeons, with the result that from about 1500 there were only dwindling numbers of 'surgeonesses' (*chirurgiennes*). In the 1550s the Swiss Félix Platter found women attending dissections in Montpellier but such arrangements were by then exceptional.[125] If women learnt the rudiments of surgery or pharmacy it was

[122] For the Hôpital Général, see below, Ch. 11, Sect. B. For home relief in Paris, L. Cahen, 'Les Idées charitables à Paris aux XVIIe et XVIIIe siècles, d'après les règlements des compagnies paroissiales', *Revue d'histoire moderne et contemporaine* (1900–1), 5–22.

[123] Cited in M. Flinton, *Sainte Louise de Marillac: L'Aspect social de son oeuvre* (n.p., n.d. [1957?]), 268.

[124] See above, Ch. 3, Sect. A, and D. Jacquart, *Milieu médical*. For a European perspective, see M. Green, 'Women's Medical Practice and Medical Care in Medieval Europe', *Signs*, 14 (1989), 434–73.

[125] E. Berriot-Salvadore, *Les Femmes dans la société française de la Renaissance* (Geneva, 1990),

most likely from unofficial apprenticeship by their fathers or husbands. Apothecaries' widows were usually entitled to inherit the practice of their husbands, though they were normally required to retain an experienced journeyman-apothecary to head the operations. Although a fair proportion of the college of apothecaries in a town would be composed of widows' businesses, the latter proviso was increasingly tightened up over the seventeenth century, reducing women's freedom of action.[126]

Along with widow apothecaries, midwives formed the other group of medical practitioners with at least a nominal presence within the orthodox medical community. Characteristically, obstetrics was the Cinderella of the medical specialisms of the university sector. Physicians customarily showed very little interest indeed in the topic, and there was almost total doctrinal stagnation about normal deliveries from antiquity through to the Renaissance.[127] Even then, signs of genuine renewal were few. Men generally left women to get on with childbirth by themselves, and the transmission of any skills or technical advances was by word of mouth among interested females. The so-called Office des Accouchées at the Paris Hôtel-Dieu, which had long had a reputation for childbirth facilities under a *maîtresse des accouchées* or *maîtresse sage-femme*, by the early seventeenth century comprised the single example of teaching by females within the French medical establishment as a whole.[128]

The development of urban functions in the later Middle Ages had, however, brought some midwives onto the fringes of public life. Regions with a developed urban network which were developing municipal health initiatives extended these to include midwives. This was especially noticeable in areas of German cultural influence—notably in Alsace and Lorraine—and of Burgundian

250–1; Lingo, 'Empirics and Charlatans', 594; Felix Platter, *Beloved Son Felix: The Journal of Felix Platter, a Medical Student in the Sixteenth Century*, trans. and ed. S. Jennett (London, 1961), 47.

[126] See e.g. F. Prévet, *Les Statuts et règlements des apothicaires: Textes intégraux accompagnés de notes* (15 fascs. in 4 vols.; Paris, 1950), iv. 979 ff.; and Jean Verdier, *Essai sur la jurisprudence de la médecine* (Alençon, 1763), 340.

[127] Useful secondary sources on midwifery include R. L. Petrelli, 'The Regulation of Midwifery during the Ancien Régime', *Journal of the History of Medicine*, 26 (1971), 276–329; T. G. Benedek, 'The Changing Relationship between Midwives and Physicians during the Renaissance', *Bulletin of the History of Medicine*, 51 (1977), 550–64; J. Gélis, *La Sage-Femme ou le médecin? Une nouvelle conception de la vie* (Paris, 1988); and M. Laget, *Naissances: L'Accouchement avant l'âge de la clinique* (Paris, 1982). For the deficiencies of theory, see J. N. Biraben, 'La Médecine et l'enfant au Moyen Âge', *Annales de démographie historique*, 10 (1973), 215–24 (and cf. Gélis, *Sage-Femme ou le médecin*, esp. 243 ff.: 'un savoir immobile'). We also have been fortunate to consult prior to publication (for which we thank her) Wendy Perkins's *Midwifery and Medicine in Early Modern France: Louise Bourgeois* (Exeter, 1996).

[128] H. Carrier, *Origines de la Maternité à Paris: Les Maîtresses sages-femmes et l'Office des accouchées de l'ancien Hôtel-Dieu, 1378–1796* (Paris, 1888); Gélis, *Sage-Femme*, 23 ff.

political hegemony (in Artois and Flanders as well as Burgundy itself).[129] In many towns, a salaried municipal midwife was sworn in by the municipal authorities, and sometimes subjected to an examination by local physicians. The woman was normally the wife of a city bourgeois and received a salary of 50 *livres* on average in the seventeenth century. In some localities, as at Dijon in 1553 and in Cambrai and Lille well into the seventeenth century, 'plague midwives' were also appointed to cope with childbirth cases during epidemics.[130]

The progress of incorporation in trades and professions also had an impact on midwifery. As with the other branches of the medical community, progress was slow, incremental, and normally conducted within the framework of the municipality. The central government, increasingly sensitive to population issues, took the glimmerings of an interest in the fate of children—Henry II (reigned 1547–9) issued an edict against infanticide in 1556, for example—but as yet lacked perseverance and the means of implementing policy. Paris was among the most precocious of cities in the field of licensing. A statute in 1560 established a system of apprenticeship and licencing in the city, under the overall supervision of the king's first barber: it was based on apprenticeship with another midwife or else via training in the Paris Hôtel-Dieu and involved certification before the surgeons of the Châtelet. With a certificate of competence, the licensed midwife was free to place a midwifery sign outside her home—usually in the form of a child carrying a candle, a woman carrying a baby or a cradle with a fleur-de-lis—and to tout for trade.[131] The certificate also gave her capacity to testify as an expert in legal cases where medical examinations of females were necessary, such as cases of rape, pregnancy, or impotence.[132]

In towns other than Paris, a variety of local systems of incorporation and licensing evolved. Medical men played an increasingly important role in this: medical examination of a midwife's competence now usually preceded, rather than followed, her oath to the municipal authorities, and the women were brought more tightly under the surveillance of medical and surgical colleges. Also pushing in the direction of greater male surveillance of midwifery was the growing interest of the Catholic Church in the woman's qualifications. The concern of the Church sprang from a wish to ensure the spiritual orthodoxy of the midwife, to avoid abortions and infanticide, to help ensure that the sacrament of baptism was properly observed, and to permit the midwife to baptize in emergency cases. The synod at Langres in 1404 had urged parish priests to take

[129] A. W. Russell (ed.), *The Town and State Physician from the Middle Ages to the Enlightenment* (Wolffenbüttel, 1981). Cf. Verdier, *Jurisprudence de la médecine*, i. 516 ff.; Jones, *Charitable Imperative*, 13; and above, Sect. B.

[130] Gélis, *Sage-Femme*, 27.

[131] J. C. Bologne, *Histoire de la pudeur* (Paris, 1986), 291.

[132] Besides the sources cited above, n. 127, cf. Verdier, *Jurisprudence de la chirurgie*, ii. 470 ff.

in hand the education of midwives, and this was renewed at councils at Sens in 1524, Chartres in 1526, and Paris in 1577. The progress of Reformation and Counter-Reformation made this line of approach more pressing. A proposal made at the Council of Milan in 1579 that midwives should ensure that a new-born child was baptized within a week of birth was accepted in large numbers of French dioceses, as was a proposal at the Council of Malines in 1607 whereby the midwife was to inform the parish priest if a family failed to take a child to baptism. Checks on midwives' Catholicism and rough educational levels became a staple part of post-Tridentine bishops' diocesan visitations, and the parish priest became the main means of ecclesiastical surveillance over them. The preoccupation remained with a woman's good morals, basic education, and Catholicity (Protestant midwives were prohibited from 1680) rather than any medical acumen.[133]

While in most of rural France women still operated informally as midwives, with little or no supervision (or only from the parish priest), the processes of incorporation in urban France brought the practice of midwifery more openly into the public domain. Some midwives—the author Louise Bourgeois, for example, the confidante of queens and princesses—even achieved public renown and, even more remarkably in a medical world of print dominated by male physicians, became an author.[134] Medical surveillance probably counted little for such women, for it usually only operated at the end of their training, and was conducted by men who would probably know far less about the realities of childbirth than themselves. Yet the price of a niche in the municipal public sphere was greater medical scrutiny—and criticism. Symptomatically, the Offices des Accouchées at the Paris Hôtel-Dieu—hitherto very much a female preserve—was brought under closer control by males. In 1606 the admissions procedures for this service had been removed from the principal midwife to the hospital's administrative board, and in 1638 it was established as a rule that a surgeon should be present at all deliveries. Symptomatically too, the practice of surgeons actually delivering children, often with the aid of forceps and crochets many midwives shunned, started to become commonplace. Traditionally, surgeons and physicians had only expected to be summoned to direct difficult deliveries. After roughly 1650 surgeons began to be present at normal deliveries, and this practice received a massive boost in 1663 when Louis XIV brought in a male accoucheur to deal with the childbirth of his mistress Louise de la Vallière. By the end of his reign, even urban women from a trading or artisanal

[133] Berriot-Salvadore, *Femmes*, 270–3. Cf. Verdier, *Jurisprudence de la chirurgie*, ii. 470 ff.

[134] Her chief publication was *Observations diverses sur la stérilité, perte de fruict, fœcundité, accouchements et maladies des femmes et enfans nouveaux naiz* (Paris, 1608). It went into many edns. in the first half of the cent.

background, it was claimed, would prefer an accoucheur to a midwife, with only lack of money holding them back.[135]

Medical writers were moreover increasingly critical of the technical competence of midwives. Ambroise Paré had been rather supportive of their ability to cope with normal cases, but some of his contemporaries and successors were far less stoical: Laurent Joubert (1578), Gervais de La Rousche (1587), and Jacques Guillemeau (1612) painted a grim picture of obstetrical incompetence among the common run of midwives.[136] The latter were also sullied through their association with one of the most notorious cases in which females' medical opinion was essential, namely impotence cases, which were increasingly criticized for unseemly lewdness and inconsequentiality.[137] The (in fact almost totally unsubstantiated) charge of the witch-finding authors of *Malleus maleficarum* (1486), Jacob Sprenger and Heinrich Kramer, that midwives were wont to become abortionists and witches, increased the ideological pressure on midwives, since this weighty tome was something of a best seller throughout the sixteenth and early seventeenth centuries.[138] It was ironic moreover that among the most acerbic critics of the latter were other midwives: Louise Bourgeois provided a devastating attack on the levels of competence of her fellows. This signalled a division within the ranks of midwifery between a few well-regarded and respectable big-city midwives and the rest, most of whom subsisted at the lower end of the social spectrum and were only marginally if at all attached to the orthodox medical community. Louise Bourgeois's publications on midwifery also marked the tendency for the technical aspects of midwifery to pass from female oral culture into the standardized and uniformized patterns of print culture. Symptomatically too, it was the élite Paris midwives who in 1630 had requested formal training courses from the Paris Faculty.

The attack on the independence and activity of midwives was part of a more general attack on the medical competence of women acting alone, unsupervised, or (in some cases) at all. Guy de Chauliac in the fourteenth century had inveighed against 'women and idiots' meddling in medical affairs, and this disdainful attitude continued. André du Breil in 1580 attacked women (as well as priests and monks) who 'under the pretext of piety and devotion ... (by practising medicine) trouble the whole universe'. Sonnet de Courval was even more outspoken, excoriating 'toothless, wrinkled, chattery, and superstitious taper-bearing old women who dare to involve themselves in medicine'. 'A woman who

[135] Dionis, cited in Franklin, *La Vie privée d'autrefois: Variétés chirurgicales*, 291.

[136] Petrelli, 'Regulation of French Midwifery', 282. See too Perkins, *Midwifery and Medicine*.

[137] Darmon, *Trial by Impotence*, 186 ff.; Bologne, *Histoire de la pudeur*, 100–2.

[138] Cf. D. Harley, 'Historians as Demonologists: The Myth of the Midwife-Witch', *Social History of Medicine*, 3 (1990), 1–26 arguing against esp. B. Ehrenreich and D. English, *Witches, Midwives and Nurses: A History of Women Healers* (New York, 1973).

gets involved in our occupation', opined the always opinionated Gui Patin, 'is a stupid animal: this is the prerogative only of those who wear a trunk-hose and are of sound mind.' This routine anti-feminism was part of a broader cultural movement whose effect was to reduce the status and position of women in public life. The role of women in craft guilds was reduced, for example; female wages fared worse than those of males; and women's role as traders in their own right was being diminished.[139] A further, important feature of this cultural shift was the new marital economy which resulted from a kind of merger of interests between the absolutist state and the family. Absolutism affected a rhetoric of paternity, just as the paterfamilias laid claim to the extensive powers of an absolute monarch. A recharged patriarchalism—evident within the family by reduced rights of wives over their property, greater paternal power over children, increased powers of imprisonment by fathers of errant female family members, and so on—bricked the family into the architecture of state formation.[140]

The obverse of this much closer scrutiny and surveillance of women from public life was an increased emphasis on their role in the domestic sphere. The usually invisible and accepted women's work of caring for and tending the sick within the family became more plain. A renovated sexual division of labour was endlessly preached, whereby, according to the Jesuit writer Cordier, 'external matters are more proper for the husband; internal matters are the business of wives'. Cordier went on to urge that women 'should be like the soldiers of a garrison who are never permitted to go beyond the walls to do battle'. If the outside world was painted as a virile space, riven with dangers, the domestic world was in contrast drenched in compassion, and fitted out as a domain in which women's 'natural' proclivities could come to the fore: 'Mothers of men by nature,' panegyrized the Jesuit Jean Caussin, 'nurses from charity, and almost servants out of patience, they are the devout, the compassionate, and the charitable sex.' Using very much the same kind of argument, the great humanist Jean-Louis Vives had earlier attacked women who 'wish to try medicines that they find written down in papers and notebooks': he encouraged 'the good matron' to provide loving care for 'husband, children, and servants'. It was, similarly, one of the precepts of the spirituality of St François de Sales (1567–1622) that if women could not all be contemplatives, they could pursue a viable and important spiritual life in the bosom of their families.[141]

[139] For a recent overview, see M. Wiesner, *Women and Gender in Early Modern Europe* (Cambridge, 1993), 82 ff. Cf. Lingo, 'Empirics and Charlatans', esp. 584; Sonnet de Courval, *Satyre contre les charlatans*, 120.

[140] S. Hanley, 'Engendering the State: Family Formation and State Building in Early Modern France', *French Historical Studies*, 16 (1989), 4–27.

[141] The quotations in this section are largely culled from Berriot-Salvadore, *Femmes*, esp. 280, 307.

Dévot literature stressed the importance of charitable activism by those in positions of social rank and safely entrenched within the patriarchal family. The proliferation of female charitable confraternities on the lines of Vincent de Paul's Ladies of Charity showed the message was getting home to the social élite, as we have seen. They bespoke a form of spiritual motherhood which was being fashioned for and by women: the Ladies would tend the poor and the sick with all the dedication and the generosity of spirit which they were enjoined to display towards their own children. Ladies vowed to 'govern this family of Our Lord as a wise mother governs her own'.[142] They were not, symptomatically, allowed to join a charitable confraternity without permission of their husband or father. A key text in this evolving gender orientation of charity was the famous *Recueil de receptes* edited by Marie de Maupeou, the mother of the fated *surintendant des finances* of Louis XIV, Nicolas Fouquet. Though this work promoted the name of Madame de Fouquet, it was in fact framed under medical advice from a Montpellier medical graduate, Delescure, initially for another son, Louis Fouquet, bishop of Agde. Endlessly edited and re-edited throughout the Ancien Régime and beyond, 'Madame Fouquet' was targeted at pious persons who wished to provide care for the sick poor, and it became the indispensable medical *vade mecum* for the dutiful Lady Bountiful.[143]

The success of the Madame Fouquet tome, the work of the female charitable confraternities like the Ladies of Charity, and the ethic of *noblesse oblige* all demonstrated that, if women were being increasingly pressured out of public life and into a world of domesticity and supervised charitable work, this cultural shift did not confine them exclusively to a world of family intimacy shut off from social concerns. This point was further, strikingly, illustrated in regard to female nursing and teaching orders. The spirit of the age seemed to weigh against them. 'Aut maritus aut murus' ('either a husband or enclosure') the popular adage went, and the fate of women in both family and convent seemed to amount to exclusion from a public life which seemed increasingly a male preserve. The emphasis on pushing women out of public life was in fact bolstered by a papal ruling in 1566 obliging all female orders to observe enclosure—a means of preventing the kind of sexual scandal which had disfigured the latter-day history of nursing communities.[144] This meant that certain late medieval

[142] *Saint Vincent de Paul*, ed. Coste, xiii. 420.

[143] X. Azéma, *Un Prélat janséniste: Louis Fouquet, évêque et comte d'Agde (1656–1702)* (Paris, 1963), 30 ff. See also below, Ch. 11, Sect. D.

[144] For the whole movement, see esp. Jones, *Charitable Imperative*, esp. 94 ff. Also useful are J. P. Gutton, 'La Mise en place du personnel soignant dans les hôpitaux français (XVIe–XVIIIe siècles)', *Bulletin de la Société d'histoire des hôpitaux* (1987), 11–19; Imbert, *Droit hospitalier*, esp. 227 ff.; and C. Molette, *Guide des sources de l'histoire des congrégations féminines françaises de vie active* (Paris, 1974). See also the relevant entries in *Dizionario degli istituti de perfezione* (8 vols.; Frascati, 1973).

and Renaissance nursing communities—notably the so-called Grey Sisters (*sœurs grises*) to be found in Flanders and northern France at Saint-Omer, Tournai, Cambrai, Arras, Amiens, and elsewhere—were obliged to observe cloistering for the first time. Female tertiaries too, attached to a regular order but practising a devotional, charitable, and teaching activity in the world, were also forced into enclosure.

The nut of enclosure proved exceptionally tough to crack. Pierre Fourier's (1565–1640) ambitious Congregation of Notre-Dame (1598), which aimed at evangelizing the countryside of eastern France through female teaching sisters, ended on the reef of enclosure in 1616. St Jeanne de Lestonnac's Order of Notre-Dame, which had begun in Bordeaux in 1605 as a teaching order had to secure ecclesiastical status by institution as a subsidiary of the Benedictines, thereby accepting enclosure. The Ursuline order, founded by St Angela Merici (1474–1540) in Brescia in 1535, offering elementary education to poor children outside the cloister, spread through much of France from the 1590s before in 1612 accepting the principle of enclosure, as well as shifting towards teaching only the daughters of well-to-do parents on a fee-paying basis. The Visitandines, founded by Sts François de Sales and Jeanne de Chantal (1572–1641) in Annécy in 1610, were initially conceived as a contemplative order which, however, expressed its love of God in visits to the sick poor. By 1618 François de Sales had ceded to episcopal pressures and agreed to full enclosure. The fate of the 'English Ladies' of English *émigrée* Mary Ward, who wished to create a female equivalent of the Society of Jesus, was much the same: formed in the early seventeenth century, they were forced into enclosure and indeed in 1631 even dissolved by the pope.[145]

These outstanding initiatives which seemed to open up for women a life in the public world were thus consistently headed off by the forces of spiritual and social conformity, though the women involved were also partly responsible for the shift to enclosure, which usually entailed a more spiritually satisfying style of living which they often favoured. It was left to the Daughters of Charity, founded by Sts Vincent de Paul and Louise de Marillac in 1633, to break the mould of enclosure and to provide a new blueprint for female pious activism. Originating as a peasant and plebeian counterpart to the more bourgeois and aristocratic Ladies of Charity, the Daughters of Charity did the humdrum work their social superiors found too repellent. By guilefully steering clear of the external forms of conventual organization, by developing close links with key members of the social élite, and by winning a glowing reputation for the sisters as women who got things done without fuss or neurosis, whilst exemplifying the highest levels of vocational commitment, Vincent de Paul and Louise de

[145] Besides the works cited above, n. 144, see Berriot-Salvadore, *Femmes*, 323 ff.

ILLUSTRATION 9. Daughter of Charity, seventeenth century. The community of Daughters of Charity, founded by the Sts Vincent de Paul and Louise de Marillac in 1633, was the most famous, most influential, and most widespread nursing order founded in the French Counter-Reformation. It specialized in care of the sick poor both in hospitals and in their homes.

Marillac were able to secure for the Daughters of Charity high esteem and legal approval by Church and State. Centrally run and increasingly rationally and bureaucratically organized, the Daughters of Charity provided the services of cooking and carrying food and medicines to the sick poor in their homes, managing hospitals, helping in prison visiting, and running workshops and schools for pauper children. The community was to be found in over 200 localities by the turn of the century, forming a truly nationwide network of poor-relief institutions.[146]

The Daughters of Charity opened the floodgates for other female communities committed to action in the world, beyond the cloister.[147] Many—the hospital sisters of Saint-Joseph (1630–43), the Sisters of Charity of Notre-Dame (1682), and the Sisters of Charity of the Presentation (1696)—were unequivocally modelled on the Daughters of Charity. A number were directly sponsored by Vincent de Paul: this was the case with the Madelonnettes, dedicated since 1629 to assisting sexually disordered women, the Sisters of the Providence of God (1656), the Sisters of Saint-Agnès based in Arras (1636) and the Augustinian community which ran the Paris Hôtel-Dieu. In the case of other important communities of sisters of charity—the Sisters of Saint-Charles, whose mother-house was in Nancy (1652), the Sisters of Saint-Maur (1666), the Sisters of Charity of Nevers (1698), and the Filles de Sagesse (1703)—the influence is less certain, though the juridical breakthrough achieved by the Daughters of Charity no less significant.[148]

Among the reasons for the sisters' attractiveness to charitable administrators were their medical skills. In all hospitals in which they served, the Daughters of Charity, for example, ran a dispensary or an institutional pharmacy. To each new establishment—whether a hospital or else a charitable confraternity dedicated to home relief—they took chests of ligatures, lancets, and surgical instruments and a copy of Madame Fouquet's *Remèdes charitables*. With their, and their imitators', emphasis that care of souls encompassed care for the body, such women constituted a major force contributing to the medicalization of hospitals and charitable institutions to which they were attached. The medical role of the new nursing communities was, however, only part of the overarching evangelizing project which they embodied. The Daughters of Charity and their like exemplified an important strand of post-Tridentine piety: a pragmatic commitment to charitable activity in the world and the inculcation of godliness into those adjudged most in need of it, namely the poor. The Daughters of Charity were at

[146] Jones, *Charitable Imperative*, 108.

[147] Besides the works cited above, n. 144 (esp. Jones, *Charitable Imperative*, ch. 3), see esp. P. Coste, *Les Filles de la Charité: Trois siècles d'histoire religieuse* (Paris, ?1933) and id., *Livre d'or des Filles de la Charité, ou Simple aperçu des plus belles notices des sœurs* (2 vols.; Paris, 1938–48).

[148] Jones, *Charitable Imperative*, chs. 3–5.

the bedside of the sick poor, their rule enjoined, to serve them 'corporally in administering food and medicines ... and ... spiritually by instructing the sick of the things necessary for salvation, in ensuring that they make a general confession of their past lives, so that by this means those who die leave this world in good estate and that those who get well resolve never more to offend God'.[149]

Nursing communities aimed to resacralize hospital space, regarded as formerly contaminated by corrupt and demoralized nurses and administrators. The model Charité hospital in Paris announced itself as 'a place of retreat for the wretched, abandoned of human succour, to whom fortune has been stingy with its favours and whose sickness causes their arms to be useless for earning the bread without which the body cannot do'.[150] This sentimental and moralizing ethos, which would take a more sinister turn in the movement for the confinement of the poor in 'general hospitals' towards the end of the century, aimed to make the hospital into an oasis of sanctity and spiritual orthodoxy. Thus there was a strong move to insist on all entrants making a confession and taking communion before receiving corporeal care. Similarly, religious communities excluded venereal cases and often childbirth cases too. 'Blasphemers in God's name, drunkards, and those of scandalous life' were excluded from the Tarbes hospital, while the Nîmes Hôtel-Dieu removed all 'lubricious and ill-bred women'. Louise de Marillac told her Daughters of Charity they should view themselves as 'sunshine which passes continually over filth without being soiled by it in the slightest'.[151] For sisters of charity, purity and cleanliness were not next to godliness, they were godliness—a point which may help to explain their long-term effect in improving standards of hygiene within poor-relief institutions.[152]

Taken overall, therefore, it is apparent that the role of women in the provision of medicine was altering over this period. Their prior quasi-exclusion from the core of the orthodox medical community was confirmed, and indeed where women did have a tenuous place, as with midwifery, this was increasingly subjected to surveillance by males, whether other medical practitioners, municipal authorities, or male ecclesiastics. It is important not to lose sight of the repres-

[149] Jones, *Charitable Imperative*, pp. 165 ff.

[150] *Factum pour les pauvres malades* (n.p., 1635).

[151] For confession, etc., see e.g. Boudon, 'Règlement', 142; L. H. Labande, *Département de la Meuse, Ville de Verdun: Inventaire sommaire des archives hospitalières antérieures à 1790* (Verdun, 1894), 75; and Croix, *Bretagne*, 664; Flinton, *Saint Louise de Marillac*, 235. For the exclusions on venereal disease and childbirth cases, see Jones, *Charitable Imperative*, 189 f. Cf. J. F. Soulet, *Traditions et réformes religieuses dans les Pyrénées centrales au XVIIe siècle* (Paris, 1974), 317 ff.; A. Puech, 'Les Pharmaciens d'autrefois à Nîmes', *Mémoires de l'Académie de Nîmes* (1879), 255 ff.; and Cahen, 'Idées charitables'.

[152] See below, Ch. 11, Sects. E and F.

sive character of the patriarchal project of relegating women to the private sphere of home and convent. Yet it is also important to note, first of all, the whole-hearted support of many women for a number of these initiatives. As we have seen, Louise de Marillac was swift to reject the idea of female charitable activists involving themselves in public policy-making. So too, trained midwives were among the most vociferous critics of shoddy midwifery, and proponents of better training—if necessary by males. It was women as well as men who were choosing to call in an accoucheur rather than a midwife by the late seventeenth century. A number of female religious orders on the cusp of engaging in an active life in the world often preferred a move towards cloistering: the spiritual rewards of a rich contemplative life beat the back-breaking grind of tending to the poor, ailing, and diseased.

The relegation of women within the sphere of compassionate and charitable activity rather than public affairs still allowed them a good deal of room for manœuvre, and emphatically did not entail their complete erasure from medical and health-care activity, or indeed from wider social involvement. On the contrary, women were able to extend beyond the informal nursing and caring roles traditionally regarded as the female domain, and to carve out for themselves a considerable place within the medical penumbra, notably through an ideology of charitable compassion, through *dévote* organizations like the confraternities of charity, and, at a lower social level, through nursing communities of active life committed to the fabrication of godliness and the healing of the corporeal and spiritual ills of the body.

F. Popular Galenism

Outside the ranks of the itinerant irregulars, empirics, Ladies Bountiful, and nursing communities so thoroughly condemned by the orthodox medical community as charlatans, there existed large numbers of local, part-time healers whose practice was normally limited to their immediate family, neighbours, and friends. Unlike those parts of the medical penumbra we have so far enumerated, however, these individuals rarely had any form of licence, certificate, or unofficial protection from within élite culture. Sometimes priding themselves on possessing esoteric medical lore, supposedly passed down from generation to generation, they occupied a tolerated position in the local community to whom they offered their services frequently free of charge. There were bone-setters, herbalists, dentists, urinoscopists, wart-charmers, and so on, as well as individuals who worked with animals, such as huntsmen and blacksmiths—to say nothing of sundry wise women and witches. For a later period it has been suggested that three or four such irregulars existed in each village. This may well be far too high—certainly if our definition is limited to individuals employing the major

part of their time in this way—but it does highlight the extensive nature of the medical penumbra on its outermost reaches.[153]

In most cases, healing was a sideline for such people, and they gained their livelihoods in other, more conventional ways. Since most lacked formal qualification, moreover, the most prudent among them tended to stay away from towns with medical corporations. A sprinkling did, however, abandon their original occupation and become itinerant healers, risking their luck where they might. One such was the cowman (*bouvier*) from Bens in Burgundy who had a temporary success in Paris under the sobriquet 'le médecin aux bœufs' ('the cattle-doctor'). Another was 'an exceptionally gross kind of yokel' called Le Brun who turned up at the royal court at Versailles, often a lucky-dip for charlatans, to offer the dying Louis XIV a secret elixir against the fatal gangrene from which he was suffering. 'The physicians permitted everything', Saint-Simon recorded, 'since there was no longer any hope.'[154] He was unable to prevent the king from dying.

As these cases demonstrate, it is highly difficult for historians to gain access to this often orally transmitted popular culture save through texts saturated in the prejudices and assumptions of the social élite. The penchant of such medicine for the cult of the secret constitutes a further problem. We can be pretty sure that the further we are away from the literate medical core, the more 'the debris of many different systems of thought'—ideas about healing which were magical, religious, astrological, symbolic, and so on—prevailed.[155] It is not our aim, in the present work, to attempt to inventorize, let alone genealogize or describe, the extraordinary range of beliefs about healing held by some people some of the time in early modern France (indeed, we have a healthy scepticism about the viability of such a task on the basis of the sources available). It does, however, seem desirable to trace the presence of medical ideas of the orthodox medical community among the broader population who lacked access to print.

Though there is much about the popular culture of health which will remain irreducibly inaccessible to the historian, we regard it as highly noteworthy that, in examining the admittedly very partial, incomplete, and skewed records that we have of popular medicine at the furthest extreme from the core of the orthodox medical community, we frequently meet ideas and beliefs which have

[153] Lebrun, *Médecins, saints et sorciers*, 93, for the estimate of 3–4 per village (citation from 1790). Note that Matthew Ramsey, for the early 19th cent., suggests rough numerical parity between regulars and irregulars, though this may be restricting the categorization of irregulars to established, non-itinerant practitioners only: Ramsey, *Professional and popular medicine*, 212–13.

[154] Dionis, *Cours d'opérations*, 540; Saint-Simon, *Mémoires*, iv. 934, 939.

[155] K. Thomas, *Religion and the Decline of Magic* (London, 1971), 185. Cf. too P. Slack, ' "Mirrors of health and treasures of poor men": The Uses of the Vernacular Medical Literature of Tudor England', in C. Webster (ed.), *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge, 1979).

started off as conventional medical doctrines and which have subsequently become lodged in systems of general belief. Even where we think we glimpse some authentic strains of a chthonic popular medicine with no moorings to élite culture, we often end up disappointed. The parish priest of Sigoyer in the Alpine region in the early nineteenth century, for example, was an alleged empiric who dealt with a case of worms by hanging the patient upside down from a hook above a bowl of warm milk, seizing the worm when it appeared to drink the milk, and attaching it to a ratchet which extricated it from the patient's digestive system: yet this bizarre 'popular remedy', which has been taken as exemplary of non-élite medicine,[156] had an impeccable ancestry in learned culture: there was even a woodcut of it published in the late fifteenth century. Other putatively folkloric remedies have similar stories: a prayer for eye complaints found in the nineteenth century, for example, which is also mentioned in Jean-Baptiste Thiers's famous 1679 attack on popular superstitions, may be traced back to the writings of Bernard de Gordon in the early fifteenth century.[157] By the nineteenth century, of course, such folkloric beliefs were so irremediably beyond the pale of scientific medicine, that it is easy to lose sight of the fact that they formed part of earlier generations' shared world of observation and belief.

While it is possible to imagine this sparse data as part of a longer-running folkloric saga stretching back into the dark mists of time,[158] it seems more pragmatic to limit ourselves to viewing such repetitions in the light of the profusion of channels which existed to allow learned medicine to reach out within the wider society, and which, conversely, helped to keep orthodox practitioners in touch with other systems of belief. The few traces we can locate of part-time, voluntary healers speaking in their own words seems to support this contention—as we can see in the case of Jean [*sic*] L'Escalier, a female 'empiric' who practised in the countryside around Angers in the 1560s and 1570s. For some reason or other, Jean's ministrations annoyed the physicians of the Angers Faculty, who claimed a monopoly of practice both in the city and its environs, and they attempted to end her career. The Faculty's case ended up on appeal in the Paris Parlement in April 1578. The defence her lawyer mounted contains a

[156] Ramsey, *Professional and Popular Medicine*, 228, for the exemplification. See above, Introd.

[157] J. Devlin, *The Superstitious Mind: French Peasants and the Supernatural in the Nineteenth Century* (London, 1987), 239 n. 36. Cf. Lebrun, 'Le "Traité de superstitions" de Jean-Baptiste Thiers: Contribution à l'ethnographie de la France au XVIIe siècle', *Annales de Bretagne*, 83 (1976), 464.

[158] This is the approach essayed, with some brilliance, in B. Duden, *The Woman beneath the Skin. A Doctor's Patients in Eighteenth-Century Germany*, Eng. trans. (Cambridge, Mass., 1991): see esp. 34 ff. There is a real danger in using the folkloric record in a trans-historical context: it lacks historical precision and conviction for the period before *c.* 1800. For an ex. of the strengths and the limitations of the approach, see M. Bouteiller, *Médecine populaire d'hier et d'aujourd'hui* (Paris, 1966).

unique account of the life of a voluntary healer. She had been brought up by a benefactress who belonged to one of the leading families of France and from whom she had learnt the art of physic. Returning to her native land she had spent her days charitably administering to the needy, curing many whom physicians had given up on and left penniless. Jean denied that she was an empiric and a sorceress as the physicians declared. She always invoked the aid of God in her cures but she was not a faith healer. She used medicaments made from oils and waters which she distilled, and she watched over her patients like a physician. According to her lawyer she had no need to be licensed for she practised a type of medicine that had existed 'in all periods, even in the early Church, without there being any need for authorization, and God had endowed the simplest amongst the people to help those who needed it'.[159]

While local physicians regarded this local healer's relationship antagonistically, her relationship towards them was surprisingly mimetic, and drew too on religious attitudes towards care which were linked in turn to the platitudes of conventional piety found as much among the social élite as the popular masses. There might be differences over diagnosis and therapeutics, but healers like Jean appear to have shared much of the same world of medical discourse as their learned confrères. Far from constituting an anti-medicine with its roots embedded in the folkloric rock of ages, the beliefs and practices of the healer Jean L'Escalier seem to embody a diluted version of medicine drawn from the culture of the élite, and specifically, indeed, from the piety of the Church and the protocols of the orthodox medical community, spatchcocked together with other cultural influences. Physicians would have been horrified at this thought. But as we have seen, their discourse on charlatanism—driven more by anxiety and vocational self-esteem than by sociological accuracy—was a poor guide to the world of regular, let alone irregular, medical practice.

'Popular' medicine thus seems to have maintained solid links of influence with conventional, 'élite' medicine. The plasticity of Galenism[160] which allowed it to permeate and suffuse an orthodox medical community characterized by frequent disagreements and scholarly disputes was such that it also spread well outside the parameters of that community. When we peel away the layers of rivalry and contempt imposed by generations of regular practitioners, we thus find strong evidence of a diffuse but recognizable 'popular Galenism' forming a major constitutive element in popular medical culture. Nor, moreover, did influence flow only in one direction. Though we would argue that a good deal of 'popular medicine' was essentially derivative of and tributary to the medical and religious ideas of the élite, it was still possible for trained physicians to learn

[159] BN MS FR 18767, fos. 302–9, process and judgement 18 Apr. 1578 (esp. fo. 305). Jean inevitably lost but the *procureur-général* was sympathetic.

[160] See above, Ch. 2, and Ch. 4, Sect. F.

from those outside the orthodox medical community, and to accept and adapt ideas coming from outside the charmed circle of Galenic doctrine. Conchina—'Jesuits' bark'—had been brought from Peru by members of the Society of Jesus and despite some initial misgivings, this product of extra-European non-élite culture had found its way into the standard pharmacopoeias by the end of the century. The quirky, much-travelled Rouen physician Pierre-Martin de la Martinière, who wrote in the late seventeenth century, held that the popular rem-edies of the French peasantry should be viewed as a similar kind of pharmaceutical storehouse to the natural resources exploited by the Iroquois. He himself offered a blend of discoveries both from popular milieux in France and from the Barbary Corsairs and sundry Lapps, Icelanders, Siberians, and Samoyeds amongst whom he had travelled and whose medical lore he had essayed.[161] Paracelsus and his followers had of course paid handsome tribute to the medical wisdom of the peasantry.[162] In much the same way, physicians at the Orléans Hôtel-Dieu freely admitted that their methods of treatment for gangrenous ergotism were taken from a local châtelaine near Romorantin (replacing bleedings, theriac, and vows to St Antony which had formerly been standard treatment in the seventeenth century).[163] Such references highlight an openness to cultural exchange which it would be foolish to ignore.

Relations between the orthodox medical community and the medical penumbra seem thus to have been, in doctrinal and therapeutic terms, a two-way street. Communication was clearly taking place across the mental Maginot Line the physicians had erected between sound physic and charlatanism. It could even be freely acknowledged. The Paris Police under Louis XIV, for example, placed in the Bastille one Madeleine du Colombier of the Rue Montmartre for making love philtres and other magical recipes: yet her evidence showed that she was for the most part acting quite conventionally for a wide range of medical conditions and serving a wide range of social types according to her knowledge of medical theory, and that doctors and parish priests had encouraged her and offered advice on the composition of simple remedies.[164]

The fact that learned practitioners and individuals within the medical penumbra essentially spoke the same language is testimony to the roots of that learning in traditional medical philosophy. A variety of channels of diffusion existed which ensured communication and exchange. The very practice of medicine, first of all, encouraged a good deal of such intercourse. As we have seen, a medical consultation was a conversation: the sick person was expected to

[161] See the analysis of F. Loux, *Pierre-Martin de la Martinière* (Paris, 1988).

[162] See above, Ch. 2, Sect. D.

[163] C. Poitou, 'Ergotisme, ergot de seigle et épidémies en Sologne au XVIIIe siècle', *Revue d'histoire moderne et contemporaine*, 23 (1976), 358.

[164] M. Boutry, 'Les Tribulations d'une guérisseuse', *Chronique médicale*, 12 (1905).

understand the physician's discourse, and his or her experience was incorporated into the treatment. To be a patient of a learned physician was thus itself a crash course in elements of classical medical philosophy. The bedside was a pedagogic opportunity for the sick person as much as for the physician. The fact that the physician would discuss the disease at length with the apothecary in attendance and the patient's family and servants extended the range of the learning experience. Laurent Joubert reflected wistfully on the more formal nature of medical practice in Spain and claimed that French physicians only had themselves to blame for their lack of authority. France was full of self-styled medical experts because Faculty doctors had 'divulged and communicated too much their rules and prescriptions, which the common people take in a crude manner and know not how to use appropriately'.[165]

The early modern hospital could also be viewed as an important organ for the diffusion of medical learning, allowing the philosophy and precepts of the orthodox medical community to reach out into society at large. Vincent de Paul sagely informed his Daughters of Charity to show the utmost obedience to doctors, discreetly learning on the job: 'Be careful', he advised, 'to remember how the physicians treat the sick in towns so that when you are in a village you will use that knowledge, and will know in which cases you ought to bleed the patient, when you ought to repeat the bleedings frequently, how much blood you ought to draw off each time, when you should use a bleeding on the foot or use leeches and which are appropriate for the different sorts of sick people you come across.'[166] Doctors probably treated far more paupers in hospitals than they did in private practice—as we shall see, although they did take on charity cases, the vast bulk of their clients were from the middle and upper classes, who could afford their fees.[167] In the hospital, the physician met the nursing sister, and also the *dévote*, and in time the trainee midwife—all important cultural intermediaries in their different milieux.

It was not, moreover, that most hospital medicine was impossibly demanding in terms of theory or practice. Hospital budgets show grain supply as by far the largest item of consumption. Most hospital care focused on feeding, with light amounts of bleedings and purges on top. To judge from the hospitals of Vannes and Vitré in Brittany in the 1650s, 80 per cent of prescriptions were for basic drugs for the wounded or else laxatives and purgatives. Indeed laxatives formed nearly three-quarters of all pharmaceutical expenses in Vannes. Surgically too, there was not much on offer: the surgeon at the Breton hospital of Ploermel was ordered by the physician in a single year to make a mere five interventions, mostly on ulcers and abcesses.[168] Hospital surgery had something of the excep-

[165] Joubert, *Erreurs populaires*, dedication, n.p.; see also chs. ix and xvi.
[166] *Saint Vincent de Paul*, ed. Coste, ix. 222–3.
[167] See below, Ch. 5, Sects. A., B.
[168] Croix, *Bretagne*, 652–4.

tional event about it: this explains the big crowd of medical students, trainee surgeons, and curious members of the general public it attracted when it did occur.

One can understand how easily committed religious activists like the Daughters of Charity with their basic drug lore and their little cases of surgical instruments could fit into the routine and everyday level of medical provision. In the hundreds of institutions in which sisters of charity served as apothecaries, there was an extraordinary paucity of complaints about them. Although hospital apothecary shops were often fitted out with impressive shelves of drug-vases and potion-boxes, there was nothing here either which was beyond the skill of a Daughter of Charity who had a copy of Madame Fouquet at her elbow.[169]

The activities of travelling charlatans comprised another means by which medical philosophy was spread broadly within society. Physicians saw only distortion and falsehood in their claims. But in fact there was often the sincerest form of flattery: imitation. Though charlatans sometimes affected the style of the pardoner, the missionary, or the fairground entertainer, they drew heavily on the language and gestures of conventional medicine, if only to parody them.[170] The ranks of travelling mountebanks were full of practitioners struggling to be regarded as part of the orthodox medical community. How many prattling *orviétan*-sellers, one may wonder, had dreamed, so to speak, of playing Hamlet? Many wandering practitioners had a smattering of medical training anyway, so were well placed to bring in medical terms in their spiels: alchemical terms seemed to go down well as did reference to foreign travel, wealthy clients, and standard authorities (often bogus).[171] They knew, as did Molière's physicians, that the simulation of plausibility and disinterestedness were the best of all selling techniques. Though frequently attacked as polar opposites of the physicians they travestied, mountebanks and their kind in fact often acted as cultural intermediaries facilitating the diffusion of orthodox medical ideas.

Another, largely oral means of transmission of medical knowledge and the spread of a knowledge of Galenic medical philosophy beyond the graduate physicians lay in the establishment of formal faculty courses in surgery and pharmacy.[172] The motive behind these courses was well intentioned: it was hoped that thereby surgeons and apothecaries would no longer be the prisoners of workshop instruction and casually thumbed Arabic texts, like Albucasis, but would gain an acquaintance with the classical roots of their trade and more

[169] This picture of hospital nursing is based on work in the archives of the Daughters of Charity, which contain a great deal of relevant material for the history of hospital medicine in particular. See notably AN S6169 (Libourne), S6170 (Mazarin, Melun), S6172 (Narbonne), S6174 (Rambervilliers). All new establishments were provided with a copy of Madame Fouquet's famous remedies.

[170] Clark, 'Onely Languag'd Men', 539 ff.

[171] Ibid. See also the works cited above, n. 1.

[172] See above, Ch. 2, Sect. B.

recent late medieval and Renaissance developments.[173] The courses were given in the vernacular, and though targeted usually at surgeons and apothecaries, could draw a more general audience.

As we have seen,[174] the printed word also served as a means of cultural diffusion. Many physicians, and even a smattering of surgeons, set down their ideas in book form so as to appeal to an audience beyond the ranks of their confrères. This move opened up the possibility of certain parts of medical science becoming available to a wider lay audience, a prospect which did not necessarily fill faculty physicians with alarm. De la Martinière noted that Hippocrates had after all written in Greek for fellow Greeks. Indeed, the popularization of medical knowledge was an end that several physicians in the seventeenth century positively championed. Pierre Tolet, hospital physician at Lyons, remarked, 'if you want a servant to follow your orders, you can't give them in a foreign tongue'.[175] At its most benign level, their aim went no further than providing the laity with the knowledge of how to make their own drugs, thus obviating the need to use an expensive apothecary. Such publications were an act of charity and not meant to put the physician out of business. Philibert Guybert, perhaps the most famous author of a self-help manual (*Le Médecin charitable* (1623)) specifically warned his readers that the wages of self-medication were death. 'Follow, therefore, only the advice of our faithful physician, who will conserve your life and spare your wealth' (in contrast presumably to the charlatan, who would spare neither).[176] At least one medical popularizer—La Framboisière—offered a lay readership a lengthy introduction to medical theory. Idealistically, he hoped thereby that empirics would be turned into 'dogmatic' physicians and enabled to obtain a faculty degree.[177]

The late sixteenth and seventeenth centuries witnessed a plethora of works of medical, as well as religious and spiritual, vulgarization written in the French language by authors within or on the margins of the orthodox medical community. The works of Paré and others were joined by Joubert's *Erreurs populaires* (1578), Guybert's *Le Médecin charitable*, and La Framboisière's *Le Gouvernement nécessaire à chacun* (1601) and his *Loix de médecine* (1608); later by de la

[173] Esp. in surgical courses, where classical texts were few, there was no initial bias against late medieval compendia prepared by physicians. The basis of the course at Montpellier in the early 17th cent. was still Gui de Chauliac: see Dulieu, *Chirurgie*, 59–65, 89–93.

[174] See above, Ch. 2, Sect. B.

[175] Loux, *De la Martinière*, 135; Tolet, cited in Davis, *Society and Culture*, 225.

[176] *Le Médecin charitable enseignant la manière de faire et de préparer en la maison avec facilité et peu de frais les remèdes propres à toutes maladies, selon l'advis du médecin ordinaire* (Lyons, 1623), 'au lecteur'. This work went through numerous edns. For the genre, see A. Wear, 'Popularized Ideas of Health and Illness in Seventeenth-Century France', *Seventeenth-Century French Studies*, 8 (1986), 229–42.

[177] Nicolas Abraham, sieur de La Framboisière, *Les Loix de la médecine, pour procéder méthodiquement à la guarison* [*sic*] *des maladies* ... (Paris, 1608), pref., p. ciii.

Martinière's *L'Empiric charitable* (1665, 1667), *Le Naturaliste charitable* (1666), and *L'Opérateur ingénu* (1668); and then by Paul Dubé's *Le Médecin des pauvres* (1669) and also by the rather more hybrid *Recueil de receptes* of Madame Fouquet (1674).[178] Such vernacular manuals imparted a wealth of medical knowledge and were guaranteed to educate a bevy of armchair Galenists.

The possibility that such books, rather than reduce charlatanism, might actually breed charlatans seems to have been something their authors did not consider. Partly this sprang from the view that the charitable dispensation of medicine aimed at dispelling secrets rather than making money from them. For de la Martinière, the divulging of trade secrets was a public-spirited, charitable act. Partly too there was a sense that only very basic levels of medication were normally necessary for the poor sick. In any case, as the naturalized Dutch physician Helvétius put it, 'the practice of medicine is not as extensive as its theory. It comes down to opening veins through phlebotomy, correcting humours by alterants, evacuating them by vomitives, purgation, sweating and ... calming them by anodines and reestablishing ferments of the stomach by remedies to fortify it.'[179] Furthermore there was a sense in which works of vulgarization were to a certain extent only telling the people what God had already provided for them: de la Martinière, for example, pointed out that Hippocrates and Galen had both conversed with and learnt from empirics, and concluded that 'the voice of the people is ineffable, since it is the voice of God'.[180]

The audience for this kind of work of popularization was very considerable. The literature joined an even more venerable tradition of medical lore exemplified in a number of much-printed and reprinted works with their roots in late medieval learning. The gnomic stanzas of the *École de Salerne*, allegedly outlining the medieval Salerno medical school's hygienic views (largely Galenic, with Arab accretions), along with Arnauld de Villeneuve's fourteenth-century commentary on them (usually entitled the *Régime de santé*) and other books on regimen derived from late medieval sources, such as the *Trésor des pauvres*, had for generations been spreading a diffuse Galenism. These precepts found their way too into the pages of crude medical, gynaecological, astrological, agricultural, and meteorological information imparted by self-help manuals such as Estienne and Liebault's *Maison rustique* and in almanacs and works such as the long-established *Calendrier des bergers*.

Many of these hoary forms of medical vulgarization received a new boost in the seventeenth century—along with several of the new popularizing classics

[178] For Dubé (and the genre in general), see J. Emelina, 'Le "Médecin des pauvres" et "Le Chirurgien des pauvres": Un témoignage sur les aspects et l'esprit de l'éducation médicale populaire au temps de Louis XIV', *Marseille* (1972), 85–95.

[179] Molière reduced this list even further: see below, p.338

[180] Loux, *De la Martinière*, 135.

such as Guybert's *Médecin charitable*, Dubé's *Médecin des pauvres*, and Madame Fouquet's charitable remedies—by their adoption in the so-called Bibliothèque bleue (the 'Blue Library'), the Troyes-based collection of cheap, roughly produced texts which provided a good deal of the popular reading of France between the seventeenth and early nineteenth centuries. The *Calendrier des bergers* had sold for 3 sous in the sixteenth century, a *Trésor des povres* for even less, and, through enshrinement in the Bibliothèque bleue and retailing by pedlars in every corner of early modern France, such works were ensured of enduring popularity and a widespread currency.[181] Adopted in a pedlar version in 1651 which gave it a fresh lease of life, the *École de Salerne* had by 1846 passed through three hundred editions since 1474.[182]

In the Bibliothèque bleue, popular Galenism merged with a good many other cultural influences. In the sensationalist wing of this kind of publication, the medically bizarre found its place among the everyday prodigies of floating islands, Siamese twins, sea-monsters, ghosts and spectres, seven-headed snakes, footless birds, and hippopotami. There was influence too from the miracle-drenched piety of the early Counter-Reformation, which under the shadow of fear of death provided recipes for sound and pious living and 'dying well' within the tradition of Christian humanism.[183] We should not, moreover, overestimate the merely popular appeal of such long-lived texts. Significantly, the *Calendrier des bergers* had been targeted at a petty noble rather than a popular audience (indeed Francis I had a copy), and retained a strong clientele from the middling and upper orders.[184] Madame Fouquet's remedies were taken by Anne of Austria in 1664, and by the dauphine in 1755, and an edition of the work was to be found alongside Guybert and other popularizing texts in the libraries of many learned practitioners well into the eighteenth century.[185] The world of what was generally thought of as popular medicine thus had its roots more deeply sunk into the *mentalités* of the intellectual élite than we usually imagine.

[181] For these forms of popular literature see R. Mandrou, *De la culture populaire aux XVIIe et XVIIIe siècles* (Paris, 1969); G. Bollème, *La Bibliothèque bleue: La Littérature populaire en France aux XVIIe et XVIIIe siècles* (Paris, 1971); and id., *La Bible bleue: Anthologie d'une littérature populaire* (Paris, 1975). For the Salernian inheritance, see Davis, *Society and Culture*, ch. 8, 'Proverbial Wisdom and Popular Errors'.

[182] Bollème, *Bible bleue*, 333 n. For prices, cf. Davis, *Society and Culture*, 197.

[183] G. Dotoli, 'La Religion dans la "Bibliothèque bleue" au XVIIe siècle' in M. Tietz and V. Kapp (eds.), *La Pensée religieuse dans la littérature et la civilisation du XVIIe siècle en France* (Paris, 1984), 284. Cf. too J. Céard, *La Nature et les prodiges: L'Insolite au XVIe siècle* (Geneva, 1977); and Emelina, 'Médecin des pauvres'.

[184] Davis, *Society and Culture*, 191.

[185] A. de Roche de Teilloy, 'Le *Recueil de remèdes* de Madame Foucquet, la mère des pauvres', *Mémoires de l'Académie de Stanislas*, 6th ser., iii (1905–6), 358–9; for inventories, see *Recueil de pièces pour les maîtres en l'art de science de chirurgie* (bound collection of relevant pieces, in BN 8–T18–120 (multi vol.)), xii.

Overall, a great deal of the medical ideas and beliefs of the French population as a whole which have come down to us seem to have been influenced, often strongly, by the ideas of the orthodox medical community (including ideas no longer currently held, especially after physicians tried to purge the record of antiquity of medieval Arab accretions). The ideas of the doctors of physic, it is true, competed against other systems of belief, not least that of the doctors of theology. Much medicine out in what we have called the medical penumbra had a strong admixture of post-Tridentine piety—the prestige of the miraculous is a particularly powerful example of this. There was, however, a widely accepted set of beliefs shared by individuals not only within the orthodox medical community but also amongst other medical practitioners marginally or not at all linked institutionally to the medical core. This did not mean that everyone agreed on everything all the time. Far from it: there was as much disputatiousness in the medical penumbra as in the core. But it does mean that we can surmise a basically unitary medical universe in early modern France, rather than the bifurcated one suggested by the physician Jean Bernier's discourse on charlatanism and popular error with which we began this chapter.

5

THE SICK AND THEIR PRACTITIONERS

A. The Choice of Practitioner

Chapters 3 and 4 have shown that the sick in sixteenth- and seventeenth-century France could consult in theory a wide range of medical practitioners, running from learned graduate physicians to theatrical itinerant charlatans to rustic Ladies Bountiful. Common sense, however, suggests that the majority of the population, the peasants and urban poor, had little choice but to seek medical aid among the less well-trained and least prestigious surgeons and apothecaries or among the army of amateur and part-time healers who offered their services for next to nothing or from a simple sense of good neighbourliness. Usually, only the affluent, and really only the affluent living in large towns, would have had the luxury of demonstrating real preference and selecting practitioners according to fancy. In other words, only a minority of the population can normally have had the chance of choosing whether or not to consult a graduate physician; the majority were condemned by poverty and geographical isolation to the services of unlearned practitioners who hovered on the fringes of the corporative community or were firmly ensconced in the medical penumbra.

This said, it must be emphasized that the distinction between rich and poor in the case of practitioner-choice was less acute than it might seem at first sight. In the first place, the poor, even the peasantry, always had some access to the upper reaches of the corporative medical community. The very fact that a growing proportion of the urban poor was hospitalized as the seventeenth century progressed meant that many from the lower orders were treated by members of the corporative community at some time in their lives. As we saw in Chapter 4, the period witnessed physicians and surgeons developing a firmer presence in hospitals.[1] But hospital inmates could hardly be said to have chosen their form of health care. More importantly, the poor, to a degree, also had voluntary access to trained practitioners.

Although we know little about the fees charged by physicians, surgeons, and apothecaries in this period, it is clear that they were set according to the means of the sick, and that the poorest clients were treated free.[2] In theory, then,

[1] See above, Ch. 4, Sect. C.

[2] See the comments of Gui Patin, 'Préceptes particuliers d'un médecin à son fils', in *La Mothe*

anyone could consult a prominent member of the corporative medical community, provided one was at hand. It is clear, too, that some well-placed members of the community deliberately sought out poor clients in the early stages of their career as a way of gaining experience and establishing a reputation. The royal accoucheuse Louise Bourgeois, for instance, having learnt her art by reading Paré(!), spent the next five years in the 1590s honing her new-found skill in the capital among the poor before she became a member of the Paris corporation of midwives in 1598.[3] Moreover, some well-placed members of the community, albeit only a few, preferred to practise among the poor, seeing this as part of their Christian duty. This was particularly the case of learned physicians in the second half of the seventeenth century who identified themselves with the Jansenist movement, the austere, Augustinian wing of the Counter-Reformation which had its spiritual centre at the convent of Port-Royal-des-Champs outside the capital.[4] The Paris graduate and physician to the Port-Royal community Jean Hamon (1618–87), for instance, was a veritable physician saint, supposedly travelling 7 or 8 leagues a day in all weathers and on an empty stomach to treat the poor in the local countryside. According to his hagiographer, Hamon believed that in looking after the indigent sick and dying he was serving Christ. As a result, 'he would enter into the stinking cabins of the rural poor with more respect than court doctors enter the Louvre'.[5]

Furthermore, even if few élite members of the corporative community, except in their early years, were likely actively to seek out and visit poor patients, the indigent were not discouraged from going to visit learned physicians or their leading subordinates themselves. Indeed, in Paris and perhaps other cities by the mid-seventeenth century the possibility had become institutionalized. It will be recalled that in 1639 the Paris Faculty had arranged for its portals to be opened twice a week to the indigent sick, who were there given free medical consultations and treatment by Faculty members.[6] But this was neither an isolated nor a novel institution. The Faculty clinic had a rival founded in the 1630s by a court doctor, Théophraste Renaudot,[7] while both were predated by many years by a monthly consultation-service for the poor run by the surgeons of

le Vayer; Gassendi; Gui Patin: Études de bibliographie et de critique suivies de textes inédits de Gui Patin, ed. R. Pintard (Paris, 1943), 64–5.

[3] Louise Bourgeois, *Récit véritable de la naissance de messeigneurs et dames les enfans de France* (Paris, 1652), 58–60.

[4] Jansenists were Puritans and predestinarians who claimed they remained orthodox, Tridentine Catholics; condemned by the papacy in 1653, they were subjected to continual persecution under Louis XIV. The standard authority on Jansenism remains A. Gazier, *L'Histoire générale du mouvement janséniste* (2 vols.; Paris, 1922).

[5] Nicolas Fontaine, *Mémoires pour servir à l'histoire de Port-Royal* (4 vols.; Cologne, 1753), iv. 393–400.

[6] See above, Ch. 2, Sect. H. [7] For Renaudot, see below, Sect. E.

Saint-Côme, established at least from 1575 in the charnel-house of the church of their patron saint.[8] Obviously, the proportion of the indigent sick in the capital who struggled to avail themselves of the free medical treatment must have been infinitesimal, but many others may have turned up on a practitioner's doorstep or accosted him in the street. There is no doubt that learned physicians could be plagued by the importunate poor when they travelled for either business or pleasure. The Montpellier student Thomas Platter, for instance, relates how he and his friends, botanizing in the Protestant Cévennes, were mistaken by villagers for qualified doctors and asked to deliberate on their goitres. The peasants were duly given prescriptions and the medical students were offered chestnuts in exchange.[9]

Clearly, then, the poor could and did consult with élite members of the corporative medical community. Whether they wanted to, or at what stage in their illness they had recourse to well-trained practitioners is another question, and, given the absence of information, impossible to answer definitely. It seems unlikely that these practitioners had a peculiarly privileged place in the popular imagination. It is much more likely that they approached semi-trained members of the corporative community, part-time neighbourhood healers, even itinerant charlatans, before they subjected themselves willingly to the professional manner and learned discourse of the trained practitioner, especially a physician. Unkempt peasants did not like to be interrogated by the perfumed and well-groomed, be it by priests, lawyers, or doctors.[10] Arguably, in the minds of the poor, there was no mystique attached to well-trained practitioners in the sixteenth and seventeenth centuries; quite the reverse. Probably, if the poor did avail themselves of an opportunity to consult with élite members of the corporative community, then they did so as a last resort. The trained practitioner was primarily consulted by the indigent when other initiatives had failed.

The only section of the indigent sick who would have found themselves cared for by trained practitioners *ab initio* would have been those in the service of a benevolent employer. This was a *noblesse-oblige* society where patrons had responsibilities as well as authority, so servants, retainers, even leasees, could

[8] Information from the papers of the surgeon of Saint-Côme, Jérôme Delanoue: see BFMP MS 2115, fo. 19 (Delanoue's comments); MS 2114, fos. 53–4 (the corporation's statutes of 1575): the surgeons' statutes emphasized it was the members' duty to treat the poor as well as the rich, and not ask for any reward.

[9] Thomas Platter, *Journal of a Younger Brother: The Life of Thomas Platter as a Medical Student at Montpellier at the Close of the Sixteenth Century*, trans. and introd. S. Jennett (London, 1963), 102–3.

[10] Peasants did not take kindly to the Counter-Reformation's introduction of auricular confession: see esp. R. Briggs, *Communities of Belief: Cultural and Social Tensions in Early Modern France* (Oxford, 1989), ch. 7. It may have been in an attempt to empathize with their poor patients that Hamon and certain other Jansenist physicians chose to dress scruffily.

enjoy the same medical facilities as their employer's immediate family. At the turn of the seventeenth century the Paris expert obstetrician Jacques Guillemeau, for example, was called in by Mademoiselle Scarron, a member of an important *robe* family, to assist in delivering one of her farmer's wives. The birth was adjudged likely to be difficult, and the good lady assembled a galaxy of medical talent to ensure its success: two physicians, seven surgeons of Saint-Côme (including Guillemeau), a royal surgeon, and two barber-surgeons.[11] Given that domestic workers composed one-tenth of the urban population, and up to one-fifth of the adult workforce, it is likely, then, that quite a significant proportion of the population were in receipt of professional medical care.[12]

The same sense of duty ensured that those who could afford to maintain a personal surgeon or physician did not keep him to themselves. Commanders on campaign in the sixteenth century expected their surgeons to look after all the wounded, while a lord in retreat on his country estate could demand that his resident trained practitioner looked after the sick of the neighbourhood. On one occasion the king ordered Ambroise Paré to repair to Flanders to look after the marquis d'Auret, whose fractured leg had refused to mend. Paré spent two months in the marquis's château, and treated the rich and poor from three to four leagues around. 'He [the marquis] recommended all and sundry to me, begging that as a favour to him, I should heal them; I protested that I had not refused a single one, and he was extremely glad.'[13]

Just as the majority of the population were less circumscribed in their choice of practitioner than might originally be thought, so the affluent were more constrained. Although in theory the medical world was their oyster, in reality most were relatively conservative in exercising their prerogative as patients. In general, they eschewed the charlatan and the empiric and placed their precious bodies in the hands of élite members of the corporative community.

This was particularly true of the immediate members of the royal family, who consistently took medical advice from learned physicians and were always administered to by trained surgeons and apothecaries. Guarding the royal body was an honoured task to which only the corporative physician could ordinarily aspire. The royal family, moreover, believed that the corporative community was to be not only consulted but also respected and obeyed. Admittedly, in the early seventeenth century Henry IV had treated his medical advisers in a cavalier fashion. When André Du Laurens became premier physician to the king, he

[11] Jacques Guillemeau, *Les Œuvres de chirurgie* (Rouen, 1649), 311, from the treatise 'Le Gouvernement de la femme enceinte'.

[12] S. Maza, *Servants and Masters in Eighteenth-Century France: The Uses of Loyalty* (Princeton, 1983), 25.

[13] *Les Œuvres d'Ambroise Paré* (10th edn., Lyons, 1641), 797–8, from his 'Apologie et traicté contenant les voyages faicts en divers lieux'.

was treated like a glorified royal valet. Each night he had to get up in the early hours and read to his royal master the fifteenth-century Spanish romance *Amadis de Gaula* in order to put the king to sleep.[14] But Henry IV, as in so many other aspects of his behaviour, was untypical of the Bourbon line. Louis XIII and XIV made themselves martyrs to the cause of learned medicine, the one doubtless fearful lest he die without an heir, the other the firm upholder of right order in all its manifestations. Louis XIV's submission of the royal anus to the skilful probings of his premier surgeon Charles-François Félix de Tassy in 1686 was merely the most famous medical moment in a long life devoted to suffering the therapeutic slings and arrows of his trained practitioners.[15] Louis XIV was always deferential before his doctors, following the advice of his final premier physician Gui-Crescent Fagon (1638–1718) to the letter. According to Saint-Simon, Fagon had the ability to blind Louis with science. Both the king and Madame de Maintenon (the king's morganatic wife) 'took him for a good doctor, and doubted nothing he said'.[16] Fagon could even thwart the ageing king in his pleasures, as in 1706 when he forbade the heavily pregnant duchesse de Bourgogne to accompany Louis to Fontainebleau. The duchess was the king's granddaughter-in-law and favourite and Louis was suitably annoyed. His ire, however, was to no avail: 'he [the king] argued; the others [i.e. the physicians] were adamant; he achieved nothing'. Fagon was an extremely powerful figure at court, all the more since Louis expected his courtiers to show a fitting humility before the Parisian Aesculapius. He insisted that courtiers use his own premier physician and got very annoyed if they countermanded Fagon's advice.[17]

The behaviour of the royal family inevitably set the tone for high society inside and outside the court. As a study of contemporary memoirs, letters, and diaries confirms, the large majority of courtiers, provincial nobles, high and low clergy, *robins*, merchants, even well-to-do artisans, all aped the king and relied primarily on well-trained members of the corporative medical community. Even though the amount of information about personal illness such sources contain is very limited compared with similar literary fragments from seventeenth-century England, the preference of the élite is unmistakable.[18]

[14] Pierre de l'Estoile, *Journal pour le règne de Henri IV*, ii. *1601–1609*, ed. A. Martin (Paris, 1958), 375, 533. *Amadis de Gaula* was translated into French in the course of the 16th cent.

[15] Louis had an anal fistula. For the operation, see Antoine Vallot, Antoine d'Aquin, and Guy-Crescent Fagon, *Journal de la santé de Louis XIV*, ed. J.-A. Le Roy (Paris, 1862), 174. The royal physicians advertised their control over the king's body by issuing periodical health bulletins in the *Gazette de France*, founded in the 1630s. Louis's medical experiences are discussed below, Sect. C.

[16] Louis de Rouvroy, duc de Saint-Simon, *Mémoires*, ed. G. Truc (7 vols.; Paris, 1953–61), ii. 393 and 653.

[17] Ibid. ii. 1032–3: comments on the death of the king's valet, Mansard.

[18] It may be that Calvinist Englishmen and women saw sickness as a sign of their personal rather than the community's collective sin, and were thus obsessed by it. For a good introd. to the

In part, this preference stemmed (like Louis XIV's trust in Fagon) from a belief in the peculiar efficacy of learned medicine. In his mid-seventeenth-century memoirs, the abbé Michel de Marolles, for one, considered the corporative community unimpeachable, claiming that on a number of occasions in his life, he had been saved by the divine instrument of the learned physician. In 1635, for instance, he had been attacked by smallpox and had had a terrible fever. Looked after by the Paris physicians François Guénault (1590–1667) and [Philippe?] Hardouin Saint-Jacques he had been successfully restored to health, thanks not least to the efforts of the apothecary Naudin, 'very trustworthy in the administration of his drugs'.[19] Eleven years later in 1646, Marolles had been struck down again at the end of Lent, this time by an unidentified illness. Despite the travails to which his body had been subject, he once more pulled through: 'again it pleased God to bless the remedies which were given to me by Monsieur de la Vigne [an apothecary], one of the best men in the world in his art, on the prescriptions of Monsieur Guenauld [Guénault], the celebrated physician of the Paris Faculty, and Monsieur Vaultier [Vautier], who had just become the king's premier physician'.[20]

However, a confidence in the competence of trained practitioners was not the only reason for the élite's conservative choice in doctors. Significantly, even those who were more cynical about the community's abilities were still keen supporters of corporative medicine. Louis XIV's courtier-poet Nicolas Boileau had good reason to be nervous about establishment medicine: he had been lithotomized at the age of 12.[21] His letters to the dramatist Racine suggest that he was a man who believed that physicians lacked the ability to get to the bottom of his various (psychosomatic?) ills. All the same, he wittingly placed himself in the hands of the physicians in 1687, when he suffered one of the greatest humiliations imaginable for a court wit and raconteur: he lost his hearing. Fagon and other court doctors recommended that the poet went post-haste to take the waters at Bourbon-L'Archambault, renowned as a spa for cases of paralysis. Once there, however, Boileau experienced no improvement and found himself at the centre of a professional quarrel. Fagon had ordered Boileau to both drink and bathe in the waters, but the local spa physician, Bourdier, claimed that immersion would kill the poet. Although angry that he was 'the plaything of a highly conjectural science', Boileau remained singularly compliant, treating his

richness of such English sources, see L. M. Beier, *Sufferers and Healers: The Experience of Illness in Seventeenth-Century England* (London, 1987).

[19] Michel de Marolles, *Mémoires*, ed. C. P. Goujet (3 vols.; Paris, 1755), i. 195. There were two Paris Faculty doctors called Hardouin Saint-Jacques in the first part of the 17th cent., Philippe (the more renowned) and Gabriel. Marolles does not reveal which of the two was his physician.

[20] Ibid. i. 321.

[21] Nicolas Boileau, *Œuvres complètes*, ed. F. Escal (Paris, 1966), p. xxxi.

sojourn at the spa as a religious penance and accepting that learned physicians had to be obeyed. 'So be it: I have delivered myself up to medicine, and the time is passed when I can step back from the brink.'[22]

Arguably, such stoicism, frequently repeated by other affluent but cynical patients, sprang primarily from a sense of corporate solidarity. The corporative medical community was part of a larger corporate world of privilege, which bound together the 'haves' in sixteenth- and seventeenth-century French society, as much as it divided them into hierarchically organized and distinctive groups. Corporative society ensured the status and continued prosperity of the incorporated. It would be naïve to assume that no beneficiary of corporatism was ever a boundary-breaker, but mutual self-interest and a common belief in the social virtues of incorporation must have largely discouraged the affluent from seeking medical aid of unlearned healers. The élite honoured the rights of the corporative medical community, just as the élite expected trained practitioners to honour the rights of other corporate groups: the effective maintenance of the privileges of one group depended on the maintenance of everyone's corporate rights. It might be acceptable in the name of the public good that the crown and other authorities should occasionally permit breaches of those rights in the case of particular individuals (hence the system of medical licensing earlier noted), but corporate rights were not to be lightly ignored.[23]

The likely efficacy of learned medicine was thus not really the issue, or only a minor part, in choosing a practitioner. Many, perhaps most, patients shared Boileau's scepticism. They recognized that medicine was a game of chance, where the throw of the dice was determined by the will of God. It was a question of choosing a practitioner who was morally and legally entitled to be the conduit of divine grace, and that conduit could only be a member of the corporative medical community. To choose a practitioner from the medical penumbra was to reject the divine option and choose anarchy above order. For this reason, members of the élite who commented on the phenomenon of the empiric and charlatan often expressed the same moral outrage as members of the corporative medical community. The moralist La Bruyère, for instance, had no illusions about the potential of learned medicine. His discussion of healers and healing, however, lambasted the quack not the learned physician, and called on the 'Aesculapius Fagon' to bring the science to perfection. Trained practitioners were doing their best; charlatans were murderers: 'If the one lets you die, the others kill you.'[24] Such corporate solidarity, of course, was all the greater in the case

[22] Ibid. 742–3: letter to Racine, 13 Aug. 1687.

[23] The most important ideologue of the society of orders was the Paris barrister Charles Loyseau: see his *A Treatise of Orders and Plain Dignities*, ed. and trans. H. A. Lloyd (Cambridge, 1994).

[24] Jean de La Bruyère, *Les Caractères*, ed. R. Garapon (Paris, 1978), 435–7, from 'De quelques usages', paras. 65–8. Cf. also the definitions of *charlatan* and *empirique* in Antoine Furetière, *Dic-*

of affluent artisans, lesser clergy, and non-noble lawyers and bureaucrats: members of the corporative medical community were their neighbours and relations.[25]

This is not to say that members of the French élite in the sixteenth and seventeenth centuries never resorted to empirics. Such a statement would be absurd. But in general they only did so in very specific circumstances. In the first place, it was legitimate to employ an empiric if no member of the corporative medical community was available and the case was pressing. Noblemen or women taken sick in the depths of the countryside frequently had no choice but to summon an unqualified healer, if they had no attendant physician of their own. Thus, when maréchal Bassompierre was struck down by a fever while campaigning against the Huguenots in the Garonne valley in December 1621, he was happy enough to be treated at Marmande by a drunken empiric, in the absence of anyone better. As soon as a royal physician, one Le Mire, reached him, however, Bassompierre immediately placed himself unreservedly in the hands of the learned practitioner, who attempted to relieve the 'furious throbbing' in the marshal's head by scarification and cupping.[26] If we believe the mid-seventeenth-century gossip-monger Tallemant des Réaux, Bassompierre's loyalty to the corporative medical community finally killed him. Struck down by another fever in the south-west of France in 1646, the maréchal was not encouraged to rest by the queen's physician Yvelin, but immediately set out for Paris and died *en route*. Yvelin's fatal counsel, it was suggested, reflected the physician's own desire to return to the capital as quickly as possible.[27]

It was also acceptable to approach an empiric where the disease had failed to respond to the treatment of a learned practitioner, or was beyond the corporative community's acknowledged competence. The neo-Paracelsian quack Roch le Baillif, for instance, definitely had a number of well-born patients in Paris in 1579, but it is likely they were the victims of incurable complaints at the end of their tether. Significantly, two of his patients, Madame de Couppé, the wife of an auditor at the Chambre des Comptes, and one D'Alençon, controller at the same institution, were suffering from cancer (of the breast and penis), a malady that physicians and surgeons in the late sixteenth century were loath to touch.[28]

tionnaire universel (3 vols.; The Hague, 1690). Of course, several famous literary figures treated the corporative medical community with contempt, notably Molière: see below, Sect. E.

[25] Boileau and La Bruyère were both originally Paris barristers, one the son of a clerk to the Parlement, the other the son of a financial bureaucrat.

[26] François de Bassompierre, *Mémoires* (4 vols.; Amsterdam, 1723), ii. 416–21.

[27] Gédéon Tallemant des Réaux, *Les Historiettes*, ed. G. Mongrédien (8 vols.; Paris, n.d.), iii. 211 (under 'Yvelin'). This was presumably the Paris Faculty doctor Pierre Yvelin.

[28] *Vray Discours des interrogatoires faicts en la présence de messieurs de la cour de Parlement, par les docteurs régents en la faculté de médecine en l'université de Paris, à Roc[h] Le Baillif, surnommé La Rivière, sur certain poincts de sa doctrine* (Paris, n.d. [1579]), 43–6, 64–5 (for an account of Roch's victims). Hippocrates had counselled leaving cancers alone, but by the end of the 17th cent. mastectomy was being practised: see below, Sect. C.

In such circumstances even resorting to female healers was not frowned on. When at the turn of the seventeenth century the duc de Guise's surgeon, Le Jeune, had failed to remedy an eye complaint of a member of the ducal household at Joinville, the patient sought out a local healer, called Claudine Menetrier. The latter (in the presence be it noted of Le Jeune) then performed the necessary operation and removed the offending mites in the white of the eye 'with great dexterity and little pain'.[29]

Finally, an empiric could always be tried *in extremis*, that is in cases where the corporative community had given up the patient as lost. It was for this reason that in 1564 the 11-year-old Jacques-Auguste de Thou was eventually entrusted to the care of a Lady Bountiful. The two attendant physicians had abandoned him; even his mother had lost hope; and he had been moved to another part of the house away from his grieving father.[30] Nowhere else in his memoirs is there evidence that De Thou and his family resorted to unlicensed healers. Even when others in the family fell dangerously sick—his brother in 1579, his father and mother in the 1580s—they were nursed to the grave by learned physicians.[31] It was for this reason, too, that the ailing Mademoiselle de Nevers, daughter of a *duc et pair*, was entrusted with eventual success to an empiric called Semini in 1622.[32] Those whom the doctors abandoned, especially if the patient were still relatively young, could flout convention without incurring a social stigma.

Even the royal family could legitimately resort to an empiric in the vale of the shadow of death. Thus, in 1680 when the wife of the king's heir, the dauphine, lay languishing of a fever that the physicians had failed to cure, she was brought back to life with the aid of quinine wine, administered by an English knight-errant, who had arrived in the capital the year before, the itinerant charlatan Sir Robert Tabor or Talbor. The subsequent lampoon penned to celebrate the physicians' discomfiture emphasized the court's relief, as much as any delight at boundary-breaking: 'Talbot [*sic*] has conquered death, | D'Aquin [the king's premier physician] cannot resist him [or it], | The dauphine is convalescing, | Let everyone sing,' etc.[33]

[29] Story told in Guillemeau, *Œuvres*, 798, from his 'Traicté sur les maladies des yeux'.

[30] Jacques-Auguste de Thou, 'Mémoires de Jacques-Auguste de Thou depuis 1553 jusqu'en 1601', in J.-A.-C. Buchon (ed.), *Choix de chroniques et mémoires sur l'histoire de France* (Paris, 1836), 565: see above, Ch. 4, Sect. D.

[31] Esp. by the *fameux médecin* Pierre du Val: see Thou, 'Mémoires', 583–8, 610, 622. De Thou's brother languished for nineteen months 1579–80.

[32] Marolles, *Mémoires*, i. 102–3.

[33] The last line was from a popular song. Details in Mme de Sévigné to Mme de Grignan, 8 Nov. 1680: see Marie de Rabutin de Chantal, marquise de Sévigné, *Lettres de Madame de Sévigné, de sa famille et de ses amis*, ed. M. Monmerque (14 vols.; Paris, 1862), vii. 128–9. The syntax is confusing because the word used for death is the masculine noun *trépas*. Tabor had been an English provincial apothecary before moving into court circles.

Louis XIV himself was finally turned over to the charlatans when his demise was imminent. As he lay dying in 1715 a peasant, called Le Brun, turned up at Versailles with an elixir against gangrene. 'The king was so ill and the physicians so at a loss that they consented [to the use of the remedy] without difficulty.' Ten drops of the elixir were given to the king in his favourite Alicante wine, but to no avail. Three days later his entourage tried again, the duchesse du Maine insisting that the doctors administer the specific of the late and quondam empiric, abbé Aignan, 'which was an excellent remedy for smallpox' (almost certainly a disease that Louis XIV did not have). When the life of the 'Roi Soleil' was ebbing away, the maintenance of order was no longer a priority, although it was fitting that this final, unsuccessful remedy should have been urged by the wife of Louis's beloved bastard.[34]

Admittedly, the medical history of one aristocratic courtier, Madame de Sévigné, would suggest that not all members of high society were as restrained in their recourse to empirics as has been so far intimated. As her vast correspondence reveals, Madame de Sévigné and some members of her immediate family whored long and hard after false physicians. However, there is no reason to assume that the behaviour of the Sévigné clan was typical, especially as the marquise herself was no commonplace seventeenth-century aristocrat. Not only does the fact that she left the only really personal correspondence of the reign of Louis XIV suggest she had a peculiarly developed sense of the self for a contemporary member of the *noblesse de race*,[35] but she was a self-confessed hypochondriac in an age of stoicism, who claimed to be unable to tolerate even the smallest discomfort without resorting to medicine. As she told her daughter, if troubled by the slightest complaint, 'I would try a thousand useless little remedies in order to find a good one; and my impatience and lack of virtue would make my hope for a cure a permanent occupation.'[36]

Moreover, Madame de Sévigné only began to go off the rails in the mid-1670s in middle age when she developed rheumatic pains in her hands. Until then, traditional court mores and her own good health had kept her loyal to a string of learned physicians, who included Jean Pecquet, Vesou, Pierre Bourdelot, and Charles Delorme. The extremely venerable Charles Delorme—he died in 1678 in his nineties—treated Madame de Sévigné throughout 1675–7, *inter alia* placing her on a course of his purgative antimony powder in the winter of 1675,

[34] Saint-Simon, *Mémoires*, iv. 934, 939. Aignan, it will be recalled, was one of the so-called *capucins du Louvre*: see above, Ch. 4, Sect. D. However, late in life, he had regularized his status by taking a doctor's degree in the Paris Faculty.

[35] It has recently been argued that the 17th cent. saw the development of the modern sense of the ego among the French aristocracy *tout court*: see J. Dewald, *Aristocratic Experience and the Origins of Modern Culture in France 1550–1715* (Princeton, 1993).

[36] Sévigné, *Lettres*, vii. 34–5.

then sending her to take the waters at Vichy in the spring of 1676 and the autumn of 1677.[37] Madame de Sévigné, who particularly disliked to be phlebotomized on account of the difficulty surgeons had in locating her veins, found the antimony powder much to her taste, claiming in a letter from her Breton estates of 15 March 1676, that it was an admirable remedy: 'he [Delorme] is right to call it the nonpareil (*le bon pain*), for it does exactly all that one can wish, and doesn't heat up [the body] at all.'[38] Nevertheless, two days after this encomium, if not before, she began to two-time her physician, taking up with a Capucin empiric called Villebrune. Writing on 18 March 1676, she declared that Villebrune was a miracle sent to her by God for her painful hands.[39] Employing an empiric became habit-forming, for after her trip to Vichy, she began to consult a handsome Italian, known as Antonio, abbé de Chelles, brought from the south by the maréchal de Brissac. Antonio, it would seem, looked after her during an illness that she contracted at Paris on her return from the spa, and by August had taken up temporary residence with her and was dosing her with his special powder. Writing to her daughter once he had left, she described their relationship with enthusiasm: 'I had close to me my pretty physician who was a great consolation; he didn't speak a word except in Italian; during the whole operation [of the powder] he recounted to me a thousand diverting things.'[40] Thus began an association with the medical underworld which lasted until her death and brought to her bedside all the leading court empirics of the day. At one point in 1685 she was even treating a reopened leg wound by applying a 'sympathetic' powder sent by her daughter to a cloth soaked in her own blood (with great success).[41]

On the other hand, however willing to fling herself on empirics (and as willing to denounce them a few weeks later for their incompetence), Madame de Sévigné never totally deserted corporative medicine. Although she poured scorn on her own learned physicians, she had no qualms in 1678 about arranging for her ailing daughter to be seen by Gui-Crescent Fagon, at that time an up-

[37] Delorme had sent Mme de Sévigné to Bourbon-L'Archambault, where he was *intendant des eaux*, but she countermanded his orders: see ibid., iv. 419–20: letter to Mme de Grignan 24 Apr. 1676. Understandably, Charles Delorme was a physician for whom the anti-Fernelian Gui Patin had little time: 'Je sais bien qu'il purge beaucoup, et même trop. Il purge souvent le corps et l'âme en même temps;' Gui Patin, *Lettres*, ed. J.-H. Reveillé-Parise (3 vols., Paris, 1846), iii. 626: to Falconet 10 Nov. 1668. For the anti-Fernelians, see above Ch. 2, Sect. E.

[38] *Lettres*, iv. 381–2.

[39] Ibid. 384–5. Her daughter must have expressed scepticism about Villebrune, for in a letter of 8 Apr. Mme de Sévigné assured Mme de Grignan that 'il ne m'a pourtant rien conseillé que l'on ne me conseille ici'.

[40] Ibid. v. 46–7: letter 2 Sept. 1676: see also, ibid. iv. 432–3; and v. 39: letters 6 May and 26 Aug. 1676. Antonio returned to Rome in early Oct.: ibid. v. 86: letter 2 Oct. Mme de Sévigné frequently uses the term *consolation* when referring to the help she receives from medical practitioners, suggesting she saw them as surrogate chaplains.

[41] Ibid. vii. 342–3: letter 28 Jan. 1685.

and-coming young court doctor in the entourage of Madame de Maintenon, governess to the royal bastards.[42] In the Sévigné entourage, learned physicians had not been displaced; they were merely forced to compete with empirics. Indeed, for the last decade of her life, Madame de Sévigné virtually turned her back on the primrose path of alternative medicine, and made frequent use of the royal physician Pierre Alliot.[43] It was Alliot who sent her to Bourbon-L'Archambault in 1687, where she found a resident physician and apothecary who had the intelligence to indulge her whims. Both, she declared, 'are of a prudence and conduct which attracts confidence for they are the first to condemn their own remedies when they don't suit'.[44]

Even the exceptional Madame de Sévigné, then, was not so out of line as to have defied convention totally. Her anarchic example, too, needs to be placed in the scales alongside the ultra-conservative medical views of her fellow courtier, the duc de Saint-Simon, for whom the maintenance of health (indeed, the maintenance of any good, personal or social) was inseparable from the maintenance of hierarchy and order. Saint-Simon could accept the recourse to quacks *in extremis*, but he had no time for those who engaged the services of empirics needlessly. As he made quite clear in his description of the untimely death of his father-in-law, maréchal de Lorge, the wages of boundary-breaking were death. The duke's father-in-law died in October 1702 at the hands of the empirical lithotomist Jacques Baulot (1651–1719), known as Frère Jacques, who had turned up at Paris in 1697 claiming to have developed a new, safe, and rapid method of cutting for the stone. Having demonstrated his skill on a court shoemaker and impressed the king's premier surgeon Félix, Baulot became an established cutter at two Paris hospitals, the Hôtel-Dieu and the Charité, and began to attract a quality clientele.[45] Saint-Simon's narrative pulled no punches. Saint-Simon's father-in-law had been confined to his house for six months with the stone and decided he could endure his pain and isolation no longer. Seduced by Baulot's reputation (Frère Jacques had operated on twenty patients in three months and hardly lost one), the maréchal submitted himself to the cutter's tender mercies. Despite the cutter's confidence—he refused the aid proferred

[42] Ibid. v. 444–6: letter to Comte de Grignan, 27 May 1678. Mme de Sévigné liked Fagon's style. Fagon seems to have first encountered Mme de Maintenon (by design) at the Pyrenean spa of Barèges in 1673, where she had gone with one of the royal bastards, the young duc du Maine.

[43] The first reference to him is in a letter of 5 Nov. 1684: ibid. vii. 303. Alliot or Aliot of Lorraine origin had come to prominence at court as a cancer specialist, and had unsuccessfully been called in to deal with Anne of Austria's breast tumour in 1665.

[44] Ibid. vii. 117–18: letter to Mme de Grignan, 9 Oct. 1687.

[45] Pierre Dionis, *Cours d'opérations de chirurgie, démontrées au jardin royal* (Brussels, 1708), 166–74. Another account of his activities is to be found in Martin Lister, *A Journey to Paris in the Year 1698* (London, 1699), 232–6. Baulot apparently learnt his trade from an Italian, one Pauloni, in the 1680s.

by Milet, chief surgeon to a company of the guards—the operation went disastrously wrong, the patient endured three-quarters of an hour of agony, and died soon after. Pointedly, Saint-Simon's narrative ended with a reference to the fact that the duc de Gramont looked in on the grisly scene and expressed the wish that Georges Mareschal (d. 1733), later the king's premier surgeon, be summoned; Mareschal, the epitome of order and rugged, honest deference throughout Saint-Simon's memoirs, had recently successfully lithotomized the duke.[46]

Overall, then, when the gaze is switched from the practitioner to the patient, much the same divide pertains between the corporative medical community and the medical penumbra. Although it might have been thought that patient-choice would have led to the erosion of that division, in a society of orders this was not the case. Broadly speaking there were two parallel networks of medical service: one for the rich and one for the poor. Moreover, where these networks intersected the corporative medical community and the medical penumbra were not rivals, for they occupied distinctive and complementary roles: just as members of the upper echelon of the corporative community were the last resort of the poor, so quacks and charlatans were usually the last recourse of the rich. When the female empiric Jean L'Escalier at her trial in 1578 claimed that her medical practice in the Angevin countryside did no harm to the material interests of the learned physicians of Angers, because she treated a constituency the physicians ignored, she was only telling the truth.[47] She confirmed the fact that the corporative community's hatred of the medical penumbra had primarily a moral rather than an economic base.[48]

B. Consulting the Doctor

Much more is known about the choice of medical practitioner in the sixteenth and seventeenth centuries than the moment in the course of a disease that a practitioner was first summoned. What little information there is, especially with regard to the poor, suggests that the response of rich and poor was strik-

[46] Saint-Simon, *Mémoires*, vi. 116–17. The loss of Lorge was a social disaster and, according to Dionis, Frère Jacques ultimately retired to the countryside to treat peasants once more; he had come from Burgundy: *Cours des opérations*, 172. For Mareschal's portrait in the memoirs, see L. W. B. Brockliss, 'The Literary Image of the Médecins du Roi in the Literature of the Grand Siècle', in V. Nutton (ed.), *Medicine at the Courts of Europe 1500–1837* (London, 1990), 138–40.

[47] BN MS fr. 18767, fo. 305 (from the process and judgement of her trial). For L'Escalier, see above, Ch. 4, Sect. F.

[48] A comment by the royal surgeon Dionis in the dedication to the king of his *Cours d'opérations*, hints at this conclusion. Uncommonly for a member of the corporative medical community, he attaches no blame to empirics who distribute remedies to the poor free of charge. Nevertheless, 'I also know that one can be very charitable, and at the same time a bad physician and a bad surgeon.'

ingly different: whereas the rich called in a doctor sooner rather than later, the poor put off the evil day as long as possible or altogether. This conclusion is borne out by the testimony of the Montpellier physician Lazare Riverius, who has left us an account of some three hundred cases he attended in the 1630s and 1640s. The sick poor he encountered invariably neglected to seek any treatment until such time as the disease was, in the Montpellier physician's opinion, much more difficult to cure. Typical was the 40-year-old pauper Antoine Santy, who suffered a tertian fever for a month in the autumn of 1643 before betaking himself to the Montpellier Hôtel-Dieu, where he was found to have developed a scirrhus of the spleen thanks to his bad diet.[49] On the other hand, the well-to-do inhabitants of Montpellier and its locality sought medical advice almost immediately. Noticeably, too, members of the élite seem to have been as concerned about their children's health as their own. Thus, the receiver of the stipends of members of the *présidial* courts of Languedoc, a Monsieur Boudon, summoned the great Riverius in 1634 as soon as his 9-year-old son went down with a fever. When the disease turned out to be smallpox and proved difficult to control, the receiver was distraught.[50] Moreover, despite the extremely high mortality rate of infants under 1 year old, Riverius seems to have been often called in to consult on the very young. In July 1642, for instance, he treated two girls of 8 months, still at their nurse's breast, who were suffering from vomiting and diarrhoea.[51]

Irrespective of the moment in time when the decision was taken by the sick individual (or his or her family) to consult a medical practitioner, the result in the sixteenth and seventeenth century was the same: the patient lost much of the freedom enjoyed hitherto to manage his or her own illness. The responsibility for the diagnosis and care of the disease was henceforth passed to an external agent. When a learned physician was summoned the sick person would first be subjected to the close scrutiny of a medical consultation in which the practitioner would diagnose the disease, offer a prognosis, and prescribe treatment. Thereafter, until the disease was cured, or the patient died, the learned physician and his representative (generally an apothecary) would be frequent visitors, ensuring that the remedies had been properly applied, watching over the course of the disease, and adjusting the treatment where necessary. Only the sick who consulted by letter, or sought advice from a physician as he passed through the town, or they passed through his, were free to accept or reject the words of wisdom of a qualified practitioner.

[49] Lazare Riverius, *Observationes medicae et curationes insignae quibus accesserunt observationes ab aliis communicatae* (Paris, 1646), 196–7. Riverius's casebook is a unique source for the period and will be referred to continually below and in the following section.

[50] Ibid. 95–6. He and his wife had already lost three children from smallpox.

[51] Ibid. 158: they recovered.

Although much less is known about the medical practice of the unqualified healer, much the same point can be made. Learned physicians, as the evidence given by Jean L'Escalier at her trial in 1578 makes clear,[52] set the tone of unlearned medical practice. Only the true charlatans, like Hieronimo di Bolonia, treated patients indiscrimately, selling wonder-drugs to all and sundry with only the most cursory of inspections. This was one of the reasons why learned physicians reduced the whole varied field of unqualified medicine to the figure of the charlatan. Anxious to emphasize that the unlearned doctor turned a scientific art and service into a commercial transaction, it was essential to identify the activities of the medical penumbra with the ethics of the fairground.[53]

The first meeting of the sick person and doctor, the consultation, was lengthy and critical, for the good physician would only diagnose and prescribe once he had weighed up the symptoms in the light of the patient's temperament and previous medical history. When Madame de Sévigné consulted Fagon on the thinness of her daughter, Madame de Grignan, the consultation lasted two hours and was of a thoroughness which clearly pleased the hypochondriacal marquise.[54] What actually went on at a consultation is difficult to say, but the inspection was primarily patient-led to the extent that the physician obtained most of his information about the sick person's condition through interrogation.

Admittedly, the physician did observe his clients: he inspected their urine and motions for signs of improper coction, and searched the body for blemishes and unnatural colouring.[55] There is evidence, too, that the physician also used his hands (however much this might have threatened his social standing).[56] Not only was the pulse felt regularly, but also other parts of the body. In 1643 Riverius was visited at Montpellier by a man called Gossel, tutor to a noble family in Dauphiné, who had been suffering from a quartan ague for a year. His investigation included feeling the patient's abdomen: 'Exploring his hypochondria, I found a great tension and hardness in the region of the liver and the spleen.'[57]

[52] Jean claimed to have learnt her art by watching physicians at work and her supporters praised her care and vigilance in treating patients: BN MS Fr. 18767, fos. 305–6.

[53] One way to do this was stress the number of patients charlatans treated, thereby emphasizing that their practice was casual and careless. Thus, according to the anonymous apologist for the Paris faculty in its fight with Roch Le Baillif in 1579, a practitioner of Orléans, called Hureau, had betrayed his ineptitude through his own mouth by boasting he had seen 4,000 patients in a year: see *Vray Discours des interrogatoires*, 75.

[54] Sévigné, *Lettres*, v. 444–6.

[55] Physicians were looking for lethal as well as indicative signs. Experience taught Riverius that where smallpox was accompanied by a bloody flux of the belly, there was little hope: see his *Observationes*, 68.

[56] The physician's place at the apex of the corporative community depended on the traditional elevation of mental above manual labour: see above, Ch. 2, Sect. A.

[57] Riverius, *Observationes*, 239–40; another ex., p. 246: again a patient with quartan fever but this time a woman who also suffered from suppressed periods.

However, such surface and superficial exploration of the patient's body was as far as the physician's physical examination went. For the most part, the physician listened to rather than looked at his patient, as the sick person or his or her representative provided an account of the disease. Doubtless from time to time the physician interrupted the narrative for purposes of clarification or to obtain a fuller description, but essentially he based his prognosis and treatment on the sick person's story. Patients were expected to know their own temperament, keep a mental note of their medical history, and be able to deploy contemporary medical discourse sufficiently to offer a full account of their malady, its symptoms, progress, duration, and so on. Where patient and doctor had never met before, as in the case of Madame de Grignan and Fagon, then the interrogation was inevitably thorough and lengthy. Madame (or more probably her mother) had a lifetime's encounter with illness to relate.[58]

Once the malady had been diagnosed and the treatment set in operation, how often the patient was visited by the doctor depended on the extent of the physician's practice. Ideally, according to the Montpellier physician Laurent Joubert, every patient should have his own personal physician who could attend throughout the illness. But this was a luxury which obviously only the extremely rich could afford, and most patients served by a learned physician would be in the hands of a busy man who could only call occasionally. Usually, this seems to have been twice a day for as long as the disease lasted, although the visits might be relatively short. Joubert estimated that a Paris physician working a twelve-hour day with twenty patients could only afford to see his clients for a quarter of an hour per visit; a physician with thirty patients could only call for seven to eight minutes.[59] Such brief visits in the Montpellier doctor's view were insufficient to study a patient's progress. As a result, he counselled the sick to choose a physician from among the less prestigious doctors in town, for a junior doctor would make up for his limited experience with closer vigilance.[60]

As the sick in the sixteenth and seventeenth centuries could be laid low for weeks, even months, with disease, especially fevers, early modern Frenchmen

[58] Hence the legitimacy of the practice of consulting physicians by letter: doctor and patient did not need to meet; a written account of the illness was a perfectly satisfactory substitute. For a study of such consultations, see below, n. 81.

[59] In the capital, the problem arose from the amount of travelling the physician had to do and climbing up and down stairs, which is doubtless why the much sought-after mid-17th-cent. Faculty doctor François Guénault was famous for riding at breakneck speed round the streets on a horse, rather than proceeding sedately on a mule: see Boileau, *Œuvres complètes*, 35 (*satire* vi) and 907 n. Guénault was a fashionable antimony doctor: see below, Sect. C.

[60] Laurent Joubert, *Première et seconde partie des erreurs populaires, et propos vulgaires, touchant la médecine & le régime de santé, refutez & expliquez* (Lyons, 1608), 'Première partie', 'premier livre', chs. 10 and 11. Paris physicians may have had more than 30 patients; the Jansenist moralist and theologian Pierre Nicole talked of doctors with 100 clients: information supplied by Dr Ben Rogers.

and women might well have seen their physician as many times in the course of a single malady as modern Britons probably would in a lifetime.[61] Such assiduity reflected the Galenic belief in the essential individuality and protean nature of disease. In return for unremittant (or as constant as possible) care, it was understood by both physician and patient (or his or her family) that the practitioner would continue to be employed regardless of his success or the perceived value of his remedies. In April 1608 one of the children of the Paris barrister Pierre de l'Estoile went down with measles, and the diarist summoned the famous Faculty physician Jean Duret (1563–1629). L'Estoile was not enamoured with Duret's treatment, for he ordered phlebotomy, a therapy that the barrister himself disliked. Nevertheless, while suspecting the great doctor's competence, L'Estoile did not resist the decision: 'As they say, one should not call a physician in whom one does not want to believe.'[62] This courtesy was even extended to unqualified healers, who (presumably) aped the assiduity of the faculty doctors. Thus, in November 1694, Madame de Sévigné's correspondant and relative Madame de Coulanges agonized over dispensing with the services of an Italian quack, Nicolas Cevoli, called Carette, who had become a fashionable figure in court circles in the early 1690s after curing the papal peer the duc de Caderousse of a chest disease *in extremis*.[63] Madame de Coulanges had employed Cevoli for six months for her chronic colic and, after initial relief, now found his remedies useless: 'Carette doses me with everything he wishes, and I swallow his remedies without confidence and without success; but I believe that it would be even worse to change doctors every day; one must be patient, and be persuaded that one only dies at God's pleasure.'[64]

Patient and practitioner were thus locked together in an informal contract. Indeed, in the sixteenth century sick individuals who submitted themselves to particularly hazardous surgical operations were not unknown to draw up real contracts with their cutters. The lithotomist César de Ville (d. 1551), for instance, entered into a contract with the Rouennais Jean de Banquemare in 1530, whereby in return for being paid in advance, he agreed to perform the operation in the nobleman's house, look after him until he was well, and reim-

[61] Some readers may still remember the time, before the private telephone and group practice, when GPs would drop in on their patients relatively frequently. Today a GP working with the National Health Service sees patients on average three times a year.

[62] *Journal*, ii. 331, 333, and 348. Admittedly L'Estoile didn't think much of this popular saw, but he significantly did not stop the phlebotomy the next day. Jean was the son of the Paris physician and Hippocratic commentator Louis Duret.

[63] Saint-Simon, *Mémoires*, iii. 696. Cevoli was practising in Tournai in 1680 where he had published a book entitled *Rationalis et methodica medendi methodus contra pseudomedicos et phlebotomine abusus*, which had been censured by various faculties, including Paris.

[64] Sévigné, *Lettres*, x. 213: Mme de Coulanges to Mme de Sévigné, 19 Nov. 1694. Carette was still her physician in Sept. 1695; ibid. 319.

burse his heirs if he died.[65] Moreover, patient and practitioner frequently remained wedded to one another for life; once entered into, the informal relationship was often only broken by death. Here, as in everything, the king set the tone, for the king's premier physician, the figure at the apex of the corporative medical community, was hardly ever dismissed. Louis XIV had five premier physicians. Only Antoine D'Aquin was rusticated, in 1693, after twenty years' service. According to contemporaries, he had been cut down to size by the king for attempting to soar too high and place his children in high office in Church and State. It seems he was the victim of a court plot hatched by Madame de Maintenon, to place her own medical protégé Fagon in the coveted post.[66]

Once consolidated, this lifetime's bond could remain tied, regardless of the practitioner's later failures in treating his clients or their families. An anonymous Marseilles bonnet-maker in the late seventeenth century, for instance, seems to have initially called upon the services of the surgeon Jacques Coudonneau in March 1686, when his 10-month-old son fell off a walnut chest and hit his head on the floor. Coudonneau 'opened and trepanned [the baby's] forehead in two places, and dressed the wound night and morning for twenty days', thereby (according to the bonnet-maker) effecting a perfect cure. Thereafter, for the next twenty years, Coudonneau was the family surgeon, but his record was lamentable, his lethal presence at difficult births culminating in October 1706 with the death of the bonnet-maker's daughter-in-law, the day after the surgeon had hooked her premature baby from the womb in pieces.[67]

A lifetime's relationship between patient and practitioner unsurprisingly led to friendship, especially where the two belonged to the same social and professional milieu. Gui Patin warned his son about becoming too friendly with his patients, and advised him not to dine with his clients. But the fact that the warning was expressed at all suggests that such sociability was not uncommon.[68] When L'Estoile's physician Le Febvre died in January 1607, the diarist expressed his sense of loss in a simple and moving tribute:

[65] *Commentaires de la faculté de médecine de l'université de Paris (1516–1560)*, ed. M.-L. Concasty (Paris, 1964), 392. Contracts of this kind seem to have been rare. In Scotland, in contrast, they were commonplace in the 17th cent., see H. M. Dingwall, ' "General Practice" in Seventeenth-Century Edinburgh: Evidence from the Burgh Court', *Social History of Medicine*, 6 (1993), 125–42.

[66] Louis Le Gendre, *Mémoires de l'abbé Le Gendre*, ed. M. Roux (Paris, 1865), 212–13; Saint-Simon, *Mémoires*, i. 106–8 (where D'Aquin is described as a client of the erstwhile royal mistress Mme de Montespan).

[67] *Mémoires ou livre de raison d'un bourgeois de Marseille 1674–1726*, ed. J.-F. Thénard (Montpellier, 1881), esp. 36 and 106. The same surgeon, or more likely his father, had stood godfather to the bonnet-maker's daughter in 1678 (p. 21).

[68] 'Préceptes particuliers d'un médecin à son fils', in *La Mothe Le Vayer; Gassendi; Gui Patin*, ed. Pintard, 64.

On Thursday the twelfth there died at Paris, in his house, Albert Le Febvre, aged 72, my physician and my good friend, by which the public and individuals lose much, for he was one of the first men in his art and one of the most expert, a man who had knowledge joined with integrity, something today quite rare, especially among those of his profession.[69]

Admittedly, this is not to say that patients only ever saw one practitioner, even in the course of a single malady. In fact, there were a number of reasons why the patient–practitioner relationship outlined above could become complicated or eroded. To begin with, it was normal practice for physicians to call in colleagues and seek their advice when the signs were difficult to read or treatment had not had the anticipated effect. In court circles, multiple consultations were commonplace and reflected the greatness of the patient as much as the ordinary physician's fear of the consequences of failure. In October 1594 Henry IV, much to his disgust, discovered fifteen physicians agonizing over the excruciatingly painful nephritis of his governor of Paris, maréchal d'O.[70] The physicians of less elevated patients, in contrast, were usually content to seek the counsel of a single senior colleague, where one was available. Famous physicians, such as Riverius, were forever being summoned to the bedside of somebody else's patient, even by perfect strangers. When Riverius passed through Bourg-Saint-Andéol in October 1645, *en route* from Grenoble to Montpellier, he was assailed by a local surgeon who insisted he saw a woman suffering from quartan fever. Calling in a prestigious colleague in a status-obsessed society was not necessarily an admission of failure; it gave patients a sense of their practitioners' standing in the corporative medical community.[71]

The actual mechanics of the multiple consultation are only partly known. Presumably, the patient had to agree to be investigated by another or other doctors, but whether the patient had any say in the choice remains a mystery. There can be no doubt that the original physician was always in charge, but equally a senior colleague called in to assist would have expected his advice to be taken.[72] One of the advantages of calling in a number of physicians might well have been that it gave the original practitioner greater freedom of action. The greater the number present, however, the more problems of precedence arose. The Paris

[69] *Journal*, ii. 221; Le Febvre seems also to have been the physician for L'Estoile's relatives; in June 1603 he failed to save the life of the barrister's 19-year-old female cousin: ibid. 92.

[70] Pierre de l'Estoile, *Journal pour le règne de Henri IV*, i. *1589–1600*, ed. L. R. Lefèvre (Paris, 1948), 434. The maréchal was lithotomized against general advice by one of the Colot family and died.

[71] Riverius, *Observationes*, 247–9. Bourg-Saint-Andéol was probably too small to have a resident physician.

[72] When Riverius was summoned to consult with a colleague, he proposed a course of action to the ordinary physician, who then graciously concurred: e.g. ibid. 1–2, the case of Antoine Mestre, suffering from suppressed urine.

physician Nicolas Ellain in the early seventeenth century attempted to lay down ethical guidelines for such occasions, which would ensure that only one opinion emerged from a multiple consultation. Physicians were urged to avoid contradicting colleagues too keenly and to oppose the views of others without bitterness. Above all, the task of interrogating the patient, summing up and producing a written report was to be left to the senior doctor present.[73]

Where seniority lay, though, as an anecdote related by Tallemant des Réaux emphasizes, was not always clear. When the Montpellier court doctor Charles Delorme called to the bedside of the son of Madame de Termine two Parisian Faculty physicians, he was not amused to find that both considered themselves his superior. Having allowed Duret (presumably Jean) to enter the chamber first, he did not appreciate Duret's colleague (unknown) also attempting to slip in before himself: 'De l'Orme [Delorme] in the presence of maréchal d'Estrées, at that moment visiting the marquise, grabbed a stick and thrashed the man, who fled.'[74] Multiple consultations involving the king must have been a particular minefield for the etiquette-conscious. The premier physician was the chief physician in the country, so there was no social need for him to defer to the individual or collective wisdom of colleagues summoned to consult with him. There again, it is clear that he could be bullied into adopting a line he had previously opposed, for Louis XIV's second premier physician, François Vautier (d. 1652), during his brief period in the medical saddle (1646–52), seems to have continually deferred to his eventual successor, the queen's physician Antoine Vallot.[75]

There were occasions, too, when a patient (or the patient's family) had no choice but to engage a new physician. It was accepted medical ethics that practitioners should abandon the case as soon as they were convinced that they could do no more and the patient was dying—indeed, they were discouraged to take up a case at all, if the initial prognosis was pessimistic, lest the physicians' remedies were brought into disrepute.[76] Patients or their representatives who refused to give up at this juncture, obviously had to seek medical help elsewhere. As we saw in Section A, it was then that the rich felt no qualms about having recourse to a quack.

However, leading physicians must also have abandoned patients who were in no danger of imminent demise, when their services were suddenly demanded

[73] BN MS Latin 9948, fos. 830–3, a speech given by Nicholas Ellain in 1615, and recorded in the MS history of the Paris theologian and rabid Gallican Edmond Richer.

[74] Tallemant des Réaux, *Historiettes*, iv. 182.

[75] Vallot *et al.*, *Journal de la santé du roi*, 3–7 (but this is Vallot's own account).

[76] See Nicolas Abraham, sieur de La Framboisière, *Les Loix de médecine, pour procéder méthodiquement à la guarison* [*sic*] *des maladies: Pratiquées sur toutes sortes de malades, es* [*sic*]*consultations faites avec des plus célèbres médecins de ce temps* (Paris, 1608), 2–3. Riverius did not want to take on desperate cases, although he gave way under pressure: e.g. the case of Jean Richelet of the Grenoble Parlement in 1645: *Observationes*, 247–9.

full-time by the grandees of French society. Many of the highly placed in Church and State did not employ their own physicians: in the seventeenth century this was very much the prerogative of the royal family and the great aristocracy. None the less, they expected the country's most renowned physicians to attend to their ailments at a drop of a hat, and not only give their learned advice but stay and look after them until they were cured. Out of the blue, then, top physicians could be whisked away from their native towns for several weeks. Normally, when Riverius was called away from Montpellier his absence was brief; common-or-garden clients, like the Frontignan physician Fouquet, who consulted Riverius in the early 1630s over a debilitating abdominal complaint, could not expect (and presumably did not demand) his permanent attendance.[77] Local bishops, however, were of a different order of being; when in early 1629, the Montpellier physician was summoned to attend the bishop of Nîmes on the sixth day of his malignant fever, he remained close to, if not actually closeted with, the prelate for over two weeks.[78] In the interim his Montpellier practice went hang. Unless he had a special arrangement with a colleague to cover for him (which is unlikely given the patient's right to choose a physician), those whom he had left in the lurch would have had to seek medical help anew.[79]

There were also free spirits who refused to be bound by social conventions and did dismiss their physicians *in media re*. Madame de Sévigné's penchant for changing or two-timing her doctors has already been noted, and in this respect she was certainly not alone. There must have been many sufferers of chronic (often arthritic and nephritic) ailments in the sixteenth and seventeenth centuries who despaired of progress as the months passed, and sought fresh medical advice directly themselves, often further afield. Among Riverius's clients, for instance, was a 50-year-old woman of Aix-en-Provence who for two years had been plagued by a loss of sensation in her abdomen and thighs, subsequent to a miscarriage. Either on her own or her doctor's initiative she had visited a spa in the Midi (presumably Balaruc) but to no avail, so had decided to call on Riverius on her way home through Montpellier.[80] Many chronic invalids may not have bothered to visit famous physicians themselves, but simply sent a letter outlining their symptoms, although the evidence from a later period suggests that consultations by post were usually arranged through the mediation of the ordinary physician.[81]

[77] Riverius, *Observationes*, 70–1. Fouquet was diagnosed as having an affliction of the hypochondria (the region below the ribcage); he did not recover.

[78] Ibid. 33–5.

[79] Those who entrusted themselves to stipended court physicians, of course, must have been continually deserted, even if the disruption was lessened by the fact that the king's ordinary physicians served by quarter.

[80] Riverius, *Observationes*, 171–7.

[81] See L. W. B. Brockliss, 'Consultation by Letter in Early Eighteenth-Century Paris: The Medical Practice of Étienne-François Geoffroy', in A. La Berge and M. Feingold (eds.), *French*

Yet, however prevalent the practice, it must be emphasized that abandoning a physician completely could be difficult, especially where the physician was unwilling to relinquish his responsibilities. Pierre de L'Estoile's relations with Jean Duret illustrate this point perfectly. As we saw, L'Estoile was dubious of Duret's capabilities, although significantly he continued to employ the Paris physician when three more of his children fell sick in June 1608. L'Estoile's patience, however, was not infinite (he had already asked a medical friend, the physician Penna the Younger, to look at his elder son on the side) and in July he decided to dispense with Duret's services once and for all. To inform Duret that the informal contract was at an end, L'Estoile sent the great doctor a parting gift in the form of a silver plaque worth 60 *livres*, a sort of 'golden handshake'. But Duret refused to accept it, just as he refused to take the money that L'Estoile also sent him to cover the consultations. Obviously, Duret felt that he was too important a physician to be dismissed by a barrister; he would be the one to decide when the relationship would end. Naturally, L'Estoile was annoyed, for he had proffered the gift 'in order to be finally on even terms with him'.[82]

What is striking, then, is how tenacious the relationship between patient and practitioner was in a period when medical intervention so often ended in failure and death. Just as the well-to-do drew their practitioners from the corporative medical community in the main, so most stuck limpet-like to their chosen doctor through thick and thin. The underlying reason for patient loyalty has already been hinted at by Madame de Coulanges. Like their practitioners (learned or unlearned), sixteenth- and seventeenth-century patients were convinced that their fate ultimately lay in the hands of God. The Lord might choose to work through the practitioners they chose, or he might not. The sick might be ever hopeful of a cure, but the majority were also fatalists and stoics. They might crave release from their ills, but they also recognized that the length of their days was measured by God. It made little sense to change physicians repeatedly in a vain attempt to defeat divine nemesis. It was irrational as well as unseemly.[83]

Medical Culture in the Nineteenth Century (Amsterdam, 1994), 87–90. The collection on which this article is based, BFMP MS 5241–5, does contain letters written by patients themselves or their lay representatives, and these letters show a reasonable command of contemporary medical discourse. Riverius preferred to receive letters from medical men, rather than listen to patients give an account of their medical history; he felt he could have done more for the woman from Aix had he been given a report by learned physicians.

[82] *Journal*, ii. 356, see also 348.

[83] Mme de Coulanges eventually dropped Carette, as she had dropped other quacks beforehand, and took up with the Leiden-trained court practitioner Jean-Adrien Helvétius. Her husband disliked her behaviour and described her as unhinged ('une personne égarée'): see his letter to Mme de Sévigné, 15 Apr. 1695, in Sévigné, *Lettres*, x. 257. Helvétius was obviously not an empiric and held a medical degree from Reims, bestowed on 30 Apr. 1680: See BM Reims MS 1085, p. 61 (under the name 'Helvetius, Adrian Engelardus'). For his success as a practitioner in the final decades of the reign of Louis XIV, see below, Ch. 10, Sect. A.

Contemporary diaries, memoirs, and letters were replete with stoical reflections on the power of God. L'Estoile in particular continually moralized on the vanity of human wishes. In September 1607, nine months after the death of his friend Le Febvre, he had an opportunity to consult about his own, unspecified malady the renowned physician of Blois Paul Reneaulme (*c.*1540–1643), who was paying a fleeting visit to the capital. Unfortunately, the opportunity was missed, but L'Estoile, now an old man, was not downhearted. 'Thereby, I neither lost nor gained: for the great doctor is up above, who alone can do, as he has made me understand both before now and at this time even more than ever.'[84] Patient–practitioner relations in this period expressed the fact that this was not just an age of order, but an age of faith.

C. Treating the Sick

The consultation complete, the physician offered his prognosis and advised an appropriate course of treatment. In a previous chapter, we examined the theory of medical practice as taught in the faculties.[85] This present section explores how practitioners put that theory into practice.

The most obvious feature about the medical practice of learned physicians and their assistants was the limited range of well-worn therapies actually deployed. Virtually whatever the disease, and with fevers especially, patients would be bled continually until they showed signs of rallying. Whether prince or pauper the treatment was the same. In November 1647 the 9-year-old Louis XIV contracted smallpox. Immediately the fever appeared his doctors ordered a phlebotomy in the hope that the loss of blood would reduce the king's temperature and encourage the appearance of the pustules. The latter, however, did not appear until the king had been bled a second time the following day, and as the fever had not even then abated Louis was bled twice more on the fourth and tenth day of his disease. The fourth phlebotomy, we are told, worked splendidly.[86] Where patients suffered from a chronic malady, they could be bled, sometimes, literally to extinction. L'Estoile reveals the case of an 80-year-old woman with the stone, one Madame de Douaile, who died after being bled thirty times in ten weeks and losing ninety palettes of blood.[87] Physicians treated mem-

[84] *Journal*, ii. 269. Reneaulme was the author of *Ex curationibus observationes quibus ets* [*sic*] *morbos tuto cito et jucunde posse debellari* ... (Paris, 1606), perused by L'Estoile. Among learned physicians, he was an early enthusiast for chemical remedies.

[85] See above Ch. 2, Sect. G.

[86] Vallot *et al.*, *Journal de la santé du roi*, 3–5. Louis XIV got off lightly. When the abbé Marolles had smallpox in 1635, he was bled eight times: see his *Mémoires*, i. 195.

[87] L'Estoile, *Journal*, ii. 505. Blood-letting was measured in palettes; we do not know what amount was actually drawn per palette.

bers of their own family no less rigorously than other clients. In 1633 the Paris Faculty physician Jacques Cousinot (d. 1646), in later life briefly premier physician of Louis XIV, went down with a 'rude and violent' rheumatism. On the orders of his father and his father-in-law Charles Bouvard, premier physician to Louis XIII, he was bled sixty-four times in eight months.[88]

Although Paris Faculty physicians seem to have been the most devoted advocates of repeated blood-letting in the first half of the seventeenth century, it would be wrong to label all members of the Paris college as bloodsuckers as contemporary critics tended to do.[89] It is evident that some Paris physicians were far more zealous advocates of bleeding than others. When L'Estoile's physician Albert Le Febvre died, it would seem that most of his clients were taken over by another Faculty doctor, Alphonse Le Moyne. But Le Moyne had a reputation as a phlebotomizer, so L'Estoile refused to join his list. Eventually, he plumped for another Paris Faculty physician, Hélin, who treated him 'well and gently ... according to my humour and complexion'.[90] The degree to which any physician ordered phlebotomy, moreover, depended greatly on the tolerance of the patient. Many patients—the adult Louis XIV, Madame de Sévigné, L'Estoile—disliked being bled intensely and would only succumb to the process under great pressure. Part of the dislike of phlebotomy was that it could often go wrong. Saint-Simon, for instance, suffered a bungled phlebotomy at the hands of his ordinary surgeon in 1704. His arm swelled up and he ran a high fever, so that the king had to lend him his own surgeon, Georges Mareschal, to clear up the problem.[91] In this form of treatment, as in others, therefore, there was always a degree of patient control and room, in part, for the sick person and his or her practitioner to negotiate the optimum treatment. What is most surprising in the case of phlebotomy is that so many patients of all walks of life endured such a debilitating therapy so stoically for so long.

In addition to being bled, patients would nearly always be purged using simple purgatives like manna, but whether this would be done at the beginning or towards the decline of the disease seems to have depended on the whim of the individual doctor and the nature of the malady. Smallpox patients, provided there were no complicating factors such as a bloody flux, seem to have been purged only late in the disease. The young Louis XIV was eventually purged twice, after some dispute among his doctors, because Vallot believed that the king was left with a mass of putrid bile in the stomach.[92] Dysentery patients, on

[88] Patin, *Lettres*, i. 353–4: letter to Spon, 16 Apr. 1645.

[89] See above, Ch. 2, Sect. G. [90] *Journal*, ii. 464, 532.

[91] Saint-Simon, *Mémoires*, ii. 304. Significantly, in the light of what was said in the previous sect., this mishap did not lead the duke to dismiss his ordinary surgeon, one Ledrun (probably Henri Ledran, 1656–1720).

[92] Vallot *et al.*, *Journal de la santé du roi*, 6–7.

the other hand, were always purged towards the outset of the disease and the treatment often repeated. In usual circumstances, Riverius ordered an enema (of milk and egg-white) on the third day of the disease, but if there was lots of blood in the patient's stools then he preferred to use a purging infusion instead. Thus in August 1637 the 8-year-old son of the president of the Chambre des Comptes at Montpellier, De Maussac, was asked to swallow a concoction composed of a substance described as rheum (presumably a mucous-like binding agent) in plantain water, mixed with lemon peel, rhubarb powder, and syrup of roses.[93]

In most cases, it must be stressed, learned physicians would order little beyond phlebotomy and mild purgatives. They were not shy to intervene in disease; indeed they saw it their duty to use their knowledge to aid nature to mature then disperse the malady. But they paid heed to therapeutic theory which enjoined them to avoid bringing their heaviest medical guns to bear from the outset. It was only when a disease was contumacious that physicians resorted to the more exotic remedies introduced in Chapter 2, Section G. They were also wedded to the ancients' theory of critical days whereby nature supposedly prepared fetid humours for evacuation on specific days in a disease's course, particularly the seventh and multiples of seven.[94] The physician's task was thus to help nature to help herself by administering purgatives on the correct days and promoting natural rather than unnatural evacuations. In the first instance, it was assumed that only a light stimulation was needed to get the body to evacuate peccant matter; strong purgatives were only needed once nature's powers had proved to be weak.[95]

In 1630 the king's advocate in the Montpellier Chambre de Comptes, De Chapoullay, was laid low for three weeks with a continuous purple fever, so-called from the purple spots which covered the whole of his body. For the first eight days of the disease (probably typhus), his ordinary physicians merely bled him three times and purged him once. At this juncture Riverius was called in and attempted to mitigate the ravages of the disease by a number of alternative therapies: cupping-glasses were applied to De Chapoullay's spine, his body was covered in poultices made from scorpion oil, confection of hyacinth was mixed with his food, and he was given cooling juleps to drink. The master's remedies, however, failed to have the desired effect, for three days later the lawyer was even worse. As a result, Riverius abandoned his initial tack and now ordered a vesi-

[93] Riverius, *Observationes*, 127–8; for his use of enemas, see the cases of the sister of Baron de la Roquette and of Riverius's own son: ibid. 186–8.

[94] For a brief introd. to the theory, see the dissertation sustained by the Paris student Jérosme Tacquart in 1599: 'Licitne diebus criticis vacuare?', BFMP TMP in fo., ii, no. 256. A particularly good account of the theory was written in the mid-18th cent. for the *Encyclopédie*: cited below, Ch. 7, n. 95.

[95] Vallot's eagerness to assist nature in her efforts led him to anticipate on occasion the critical day: cf. his comments in Vallot *et al.*, *Journal de la santé du roi*, 56.

catory to be placed on De Chapoullay's head and cupping-glasses to the lower part of his body. At the same time a new julep was ordered made of barley, bugle, pimpernel, and red roses, while a new powder was added to the lawyer's food, this time made of pearl, coral, ivory, deer-horn, and bezoar stones. Still, however, the patient failed to respond, and on the fourteenth day a further powder was substituted, created simply from a substance called mineral bezoar (doubtless a specially formed mineral compound). Riverius also ordered that the substance be taken in liquid form in a concoction of thistle water, camphor, and prunella salt. At last the appropriate remedy was found and on the sixteenth day the disease was on the wane, helped on its way by the patient taking two further purgatives.[96]

Riverius thus initially tried to cure De Chapoullay's contumacious fever with products of the vegetable and animal kingdom. Such a softly-softly approach seems to have been characteristic of his therapeutic procedure on all occasions. Indeed, the year before, when the bishop of Nîmes had laboured under a continuous (but not purple) fever for a similar three-week term, the Montpellier physician had been reluctant to go beyond bleeding and purging his patient, and giving him cooling juleps. It was only when the prelate suffered a relapse after he had managed to leave his bed on the thirteenth day that recourse was had to more violent remedies, now deemed to be necessary for fear lest the bishop had caught the plague on top of his existing ill. As a result Riverius ordered that the prelate's food be spiced with bezoar stones, that he be given a julep containing the pestifuge theriac, and that he drink nothing but sulphuric acid. The harsher regime apparently worked, for the vitriol provoked sweating and defecation as was intended, and the bishop emerged fit and well on the twenty-third day of his malady.[97]

Interestingly, if as a last resort Riverius frequently deployed drastic purgatives, minerals, and exotic concoctions like theriac, he seems never to have advocated the use of the poison antimony as a fever-drug.[98] However, in the two decades for which we have information about his practice—the 1630s and 1640s—it is evident that antimony, taken in the form of antimony wine, was commonly used in the capital as a violent emetic in fever cases. Indeed, the letters of Gui Patin, the great opponent of metallic remedies, are full of examples of highly placed patients who unwisely put their trust in physicians who prescribed the substance in their day-to-day medical practice. Patin's *bête noire* was

[96] Riverius, *Observationes*, 16–17.

[97] Ibid. 33–5. In the observation cited in n. 96, above, Riverius referred to a case of purple fever successfully combated with a tisane of vitriol and nitre.

[98] Riverius treated long-standing victims of tertian fever with a bolus which contained mercury and the violent purgative scammony; the pill did not always purge! See *Observationes*, 192–3: case of Pierre Allegre.

his Faculty colleague François Guénault. Among Guénault's victims, Patin listed the king's premier physician François Vautier, himself a fulsome prescriber of antimony, Guénault the younger, his physician nephew, and the antimony doctor's own daughter who was supposedly given the substance whilst in labour.[99]

In his letters Patin gave no idea as to how or when antimony was administered, but there is no reason to believe that Guénault or other antimony doctors used the poison any more cavalierly than Riverius used other products of the mineral reign. On the famous occasion in 1658 when it was given to Louis XIV, and its use in consequence received the royal seal of approval, it was very much administered *in extremis*. Louis went down with what historians have generally thought to have been typhus on 29 June. For the first days of his illness the disease was treated in a standard fashion: the king was repeatedly bled (in the arm and foot) and given enemas. On 5 July, when the doctors were convinced that the king was suffering from purple fever (there were no spots but the king's whole body was puffy as if he had been bitten by a snake), it was felt that more drastic action was needed. Vesicatories were applied to the king's arms and legs in order to deal with a fluxion on his chest which was giving concern, and he was given a more vehement purgative, containing cream of tartar, tamarisk salt, mineral crystal, and twenty grains of fixed nitre. The purgative worked effectively but the king's condition did not improve over the following three days. Despite further phlebotomies, he had difficulty in breathing and it was probably at this juncture that Louis began to defecate and urinate involuntarily in his bed. On 8 July (that is on the ninth day of the disease), the decision was taken, on Vallot's prompting, to give the king an extraordinarily violent purgative in the form of antimony or emetic wine. Three ounces of emetic wine were mixed with a laxative tisane, and the king made to drink an ounce. The results were as the premier physician had hoped. Louis vomited only twice, but was 'purged twenty-two times without too much violence of a serous, greeny-yellow matter'. Thereafter, the fever abated and the king gradually recovered, although it was a further eighteen days, and several purgatives, enemas, and phlebotomies later before Vallot believed his royal master was completely out of the wood. Moreover, for at least the whole of 1659 and 1660 the king was daily given a mild purgative of cream of tartar, mineral crystal, manna, and senna taken in a veal bouillon to temper his entrails and preclude the development of an acid serosity in his chest.[100]

[99] *Lettres*, iii. 5–6: letter to Falconet, 5 July 1652; i. 423 and ii. 80: letters to Belin, 8 Jan. 1649 and 21 Oct. 1653. Patin refers to Guénault's role in promoting the use of antimony in the letter of 8 Jan. For the battle over the value of antimony, see above, Ch. 2, Sects. D and E, *passim*.

[100] Vallot *et al.*, *Journal de la santé du roi*, 51–74. This was Vallot's account of the disease. Vallot had given demonstrations in how to prepare antimony for many years in the Jardin du Roi.

There can be little doubt that Louis nearly died in 1658. Vallot treated the cure as beyond comprehension: 'One can say with truth that God has conducted this cure by ways that are extraordinary and by comforts and graces that are particular, for he has used secondary causes in a conjucture which seemed to be rather suited for the miraculous than the skill and experience of physicians.'[101] If Louis's was a typical case, then antimony was only given to those apparently at death's door, which would help to explain the high mortality with which the drug was associated. Antimony, much more even than many other minerals, was a substance of genuine last resort.

For the most part, then, minerals were deployed by learned practitioners neither widely nor casually. Moreover, in most instances, they were not used in isolation but in a concoction created from a variety of other vegetable and animal products in the form of a specific or medicine specially devised to combat the malady from which the patient was suffering. It was in the use of specifics that the learned physician displayed his individual skill and expertise, for their number was legion. Many in the sixteenth and seventeenth centuries were in the public domain, their contents revealed by their inventors in or after their lifetime.[102] Others, however, were medical secrets, their composition known only to the physician who used and probably invented them. Riverius, for instance, developed a specific for the cure of a contumacious quartan or tertian ague, but he never revealed its composition, only its swift effect on those who had been suffering for many months. Typical was the case of one De Lespine, councillor in the Montpellier Chambre de Comptes, who was given the febrifuge in March 1645 after labouring under a quartan fever for seven months and who showed signs of dropsy. The medicine worked violently, purging the councillor twelve times and causing him to vomit on three to four occasions. Overall, however, the effect was benign, and although there were later complications—De Lespine's urine was black and thick, and he felt pain in his hypochondria—the fever was eventually triumphantly controlled after two further doses of the secret formula.[103]

Writing in 1646, Riverius revealed that he had searched for the specific for the thirty-four years he had practised medicine, but had only begun to use it for the

[101] Ibid. 63–4.

[102] At mid-16th cent. Montpellier medical students like Felix Platter kept commonplace books of remedies used by the town's physicians. Felix also surreptitiously copied recipes from a manuscript ledger compiled by the former Montpellier physician Jean Falcon, that his landlord, the apothecary Laurent Catalan, kept locked up in his attic: Felix Platter, *Beloved Son Felix: The Journal of Felix Platter, a Medical Student in Montpellier in the Sixteenth Century*, trans. and introd. S. Jennett (London, 1961), 83.

[103] Riverius, *Observationes*, 223–4. Throughout the text there are numerous accounts of the successful application of this febrifuge: see esp. 220–4 and 239–46. Riverius blamed relapses on the patients' poor diet: e.g. the case of the quartan fever of De Chapoullay of Grenoble (pp. 243–4); this is the same patient described above as suffering on another occasion from purple fever.

past fourteen months. He was thus unwilling to reveal its contents until he had tested its virtue further. The interested would have to make do with clues let drop in its hermetic description: 'This most precious medicament is composed of the twelve labours of the triple Hercules ridden to his highest nobility; to which, to complete the effect of the work, is added at last the four athletes.'[104] How this and other specifics was actually developed remains just as mysterious, but it seems from Riverius's own comments that they were tested first on the poor.[105] When Vallot, then, boasted that he gave free consultations to the poor of Paris in his laboratory at the Jardin du Roi, it is likely that his indigent patients were used as guinea-pigs to test his various antimony-based medicines.[106]

Specifics were often violent drugs to be used *in extremis*. Occasionally, however, they lost their exotic and mysterious status and became commonplace remedies, to which physicians would have recourse from the onset of a disease. This could happen regardless of the provenance of the drug, for a number of commonplace specifics started life as the inventions of charlatans or empirics. This was most notably the case with specifics based on cinchona bark or quinine. When quinine was first introduced to the royal court in 1679 by the empiric Tabor, it was as another last-resort drug, used to cure fevers that the learned physicians had failed to control. It was in this guise that it was administered to the dauphine in November 1680, then some years later prescribed by the premier physician D'Aquin for Louis XIV. In August 1686 Louis had gone down with his first bad fever for over twenty years (almost certainly an attack of malaria) and had been bled and purged, but to no avail. His physicians, therefore, licensed the use of the new febrifuge that had become all the rage in the capital since the dauphine's recovery. An ounce of the bark of cinchona root, well mashed, was infused in a pint of Burgundy wine, and the king asked to take 4 to 5 ounces every four hours. The specific worked successfully, and the king was given repeated but gradually smaller doses for the next month.[107] For the king, this was to be the first of many encounters with quinine wine, as the malarial infection became chronic and Louis experienced bouts of the fever virtually every year for the rest of his life. Over the next ten years Louis was prescribed the drug more and more frequently, taking the remedy in various forms—in Burgundy wine, in champagne, even (on the advice of Fagon) neat[108]—and often for long periods of time. Increasingly, too, quinine was administered as a standard remedy, albeit alongside bleeding and purging. Indeed, in 1694 the king, whose

[104] Riverius, *Observationes*, 250–3. [105] Ibid. 253.

[106] Vallot *et al.*, *Journal de la santé du roi*, 60–1. Significantly, the poor were not refused any remedy they might need.

[107] Ibid. 171–3.

[108] Cf. Fagon's comments, ibid. 211; the king took quinine neat for the first time on 18 June 1688; ibid. 194.

dislike of phlebotomy has already been noted, was allowed to take quinine first of all. A drug initially taken *in extremis* had become a commonplace medicament.[109]

Of course, quinine, a drug from the New World, was a vegetable product, one then whose ingredients did not have the same dangerous resonances in the contemporary mind as mineral-based specifics. Nevertheless, a similar transformation occurred in the course of the seventeenth century in the use of one kind of metallic remedy, natural mineral water. Admittedly, mineral water was never deployed as a specific, for it was prescribed as a cure for many different diseases. However, it too began life as a therapy of last resort and ended as an everyday remedy.

The specifically French spa first began to develop in the late sixteenth century. As we saw in Chapter 2, it was only then that the learned physicians began to recognize the medical potential of mineral water, a therapy hitherto dismissed as a Paracelsian remedy.[110] Before the final quarter of the century the sick who ventured to try the new remedy on their own initiative were forced to visit spas outside the kingdom. As late as 1580–1 the nephritic Montaigne was compelled to journey to Plombières in Lorraine, Baden in Switzerland, and Lucca in Italy in search of a cure for his stone.[111] By the turn of the seventeenth century, however, mineral-water therapy had become an accepted weapon in the physicians' arsenal. Indeed, by then they were even having the water bottled and brought to the patient. As early as 1600, when Henry IV fell sick while residing at Lyons (probably again a victim of the stone), his premier physician Jean Ribit, sieur de La Rivière (*c.*1546–1605), ordered his royal charge to drink mineral water imported from Pouges (north of Nevers).[112] Natural mineral water, it was now felt, could ease or cure a number of chronic disorders. Besides its value in alleviating the stone, physician promoters of 'taking the waters' suggested its use in cases of dropsy, paralysis, period problems, and infertility.[113]

[109] Ibid. 216. It is possible that the same transformation occurred in the use of the emetic ipecacuanha as a specific against dysentery, introduced by the Dutch-trained court physician Jean-Adrien Helvétius in the mid-1680s: discussed below, Ch. 10, Sect. A. According to the English physician Martin Lister, visiting Paris in 1698, ipecacuanha was the most celebrated remedy for a malady to which the inhabitants of the capital were peculiarly prone (although not a drug he himself used): see his *Journey to Paris*, 231.

[110] See above, Ch. 2, Sect. G. The first spa to have been developed seems to have been Balaruc near Montpellier.

[111] Michel de Montaigne, *Journal de voyage en Allemagne et Italie*, ed. L. Lautrey (Paris, 1906), esp. 19–20, 66–72, 87–94, 317.

[112] Nicolas Abraham, sieur de La Framboisière, *Le Gouvernement nécessaire à chacun pour vivre longuement en santé* (2nd edn., Paris, 1601), 433. Ribit is not to be confused with the empiric Roch le Baillif, sieur de La Rivière at the court of Henry III: see H. Trevor-Roper, 'The Sieur de la Rivière, Paracelsian Physician of Henri IV', in A. Debus (ed.), *Science, Medicine and Society in the Renaissance* (2 vols.; London, 1972).

[113] For early exx. of spa literature, see above, Ch. 2 nn. 156 and 304, for pamphlets promoting the value of the waters of Pouges, Bourbon-Lancy and -L'Archambault, and Balaruc.

Yet, initially, drinking or bathing in mineral water was a therapy not lightly to be undertaken: it was the recommended treatment for rebel maladies that the learned physician had failed to subdue by other means.[114] The number of recognized French mineral springs and the number of patients frequenting them grew rapidly in the first half of the seventeenth century, but they remained the haven of the chronic, and usually desperate, sick. They were never then pleasure-palaces of the rich in the making (unlike many of their foreign counterparts), and the facilities were often crude or non-existent.[115] In consequence, the healthy that were found in their environs were either the servants of the ailing well-to-do or casual observers like Michel de Marolles, just passing through.[116]

However, after 1650 visiting a French spa became more fashionable, and many of the patients, if still suffering from complaints their physicians had failed to combat by traditional remedies, had relatively trivial, if debilitating, maladies, and sought the aid of the spa at an early stage in their disease. It will be recalled that Madame de Sévigné went to Vichy in 1676 to seek comfort for her rheumatic hands, while Boileau went to Bourbon-L'Archambault ten years later to be cured of his deafness.[117] Some members of the aristocracy began to attend spas regularly; the king's mistress Madame de Montespan, for instance, seems to have gone to Bourbon every year for twenty years in search of a health tonic.[118]

Even after 1650, it must be said, French spas partly retained their character of being courts of last appeal. On a second visit to a spa in 1687 Madame de Sévigné was appalled by the sight that greeted her at Bourbon. Most patients, she declared, came to the spa by litter. 'There are people here, who are crippled and half-dead ... an infinity [of patients] suffering the effects or the early symptoms of apoplexy.'[119] For every Madame de Sévigné, then, there must have been a clutch of desperate people like the Toulouse embroiderer Antoine Hélie, who found a cure for his anal fistula in the waters of the Pyrenean spa Barèges, after taking many useless remedies.[120] A world even partly peopled by stretcher cases

[114] La Framboisière, *Gouvernement nécessaire*, 410, was peculiar at the turn of the 17th cent. in suggesting that the waters of Spa (in the Spanish Netherlands) or Pouges might be drunk to forestall an onset of the stone.

[115] L. W. B. Brockliss, 'The Development of the Spa in Seventeenth-Century France', in R. S. Porter (ed.), *The Medical History of Waters and Spas* (*Medical History*, suppl. 10; London, 1990). For the 17th-cent. growth of some English spas, see S. McIntyre, 'Towns as Health and Pleasure Resorts: Bath, Scarborough and Weymouth, 1700–1815', D.Phil. diss. Oxford, 1963, *passim*. For an idea of the facilities eventually available at the spa in the Spanish Netherlands which lent its name to the mineral spring, see Carl-Ludwig Poellnitz, *Amusemens des eaux de Spa: Ouvrage utile à ceux qui vont boire ces eaux minérales sur les lieux* (2 vols.; Amsterdam, 1734).

[116] Marolles, *Mémoires*, i. 228: on a casual visit to Bourbon-L'Archambault in 1639.

[117] See above, Sect. A.

[118] *Mercure galant*, Aug. 1687, p. 88, gives a list of the people of quality, including Mme de Montespan (an old hand) attending Bourbon-L'Archambault in 1687.

[119] *Lettres*, viii. 106, 107, 111: letters to her daughter, 25 and 27 Sept. 1687.

[120] Vallot *et al.*, *Journal de la santé du roi*, 178–9 n.

was scarcely likely to be one of vibrant sociability and healthy visitors in the second half of the seventeenth century quickly got bored. When in 1681 Madame de Maintenon took her young charge, the king's bastard son the duc du Maine, to Barèges in search of a cure for his lameness, she soon discovered that the healthy domestics in her entourage were anxious for a speedy return to the capital.[121]

Moreover, if the proportion of patients *in extremis* fell in the second half of the seventeenth century, the majority remained invalids, for the real medical revolution in the use of spa water after 1650 was its role in recuperative treatment. Riverius had never recommended that his patients use mineral waters as a restorative, but around 1700 the practice was well established. Virtually every patient who wrote to the Paris physician Étienne-François Geoffroy in the early eighteenth century was urged to end the advised course of treatment by 'taking the waters'. Ideally, patients were told to visit a particular spa, for by then specific spas had become associated with certain maladies, but Geoffroy accepted that this was not always possible. He was quite willing in consequence for patients to visit their nearest spa, consume the mineral water in bottled form at home, or even (at a pinch) make their own brew out of blacksmith's nails, infused in a bottle of red wine.[122] Explaining this change in use is difficult. Presumably, the consumption of mineral water was intended to have a mildly purgative effect, thereby ridding the body of the last vestiges of its peccant humour(s). It was already a commonplace of Galenic therapy that convalescents should be given warm baths.[123] What is certain is that, as so often, the king's physicians helped establish the trend. Vallot was prescribing mineral-water restorative therapy for Louis XIV in the 1660s. When the king suffered attacks of vertigo in 1664, 1665, and 1670, his treatment was completed in each case by a course of bottled mineral water from Saint-Myon and Encausses, a spa in south-west France.[124]

Truly desperate patients would travel vast distances to take the waters. They did so, as Antoine Hélie explained, to avoid the only remaining therapeutic alternative: surgery. Throughout the sixteenth and seventeenth centuries there

[121] Françoise d'Aubigné, marquise de Maintenon, *Lettres*, ed. M. Langlois, ii (Paris, 1935), 386: letter to the marquis de Montchevreuil, 20 June 1681.

[122] Brockliss, 'Consultation by Letter', 78, 98, 100. For the development of the bottled mineral-water industry in the 17th cent.: see Brockliss, 'Development of the Spa', 40. The industry only properly became organized in the following cent.: see below, Ch. 12, Sect. B.

[123] Hence the existence of the Parisian corporation of bath-attendants noted earlier: see above, Ch. 3, Sect. E.

[124] Vallot *et al.*, *Journal de la santé du roi*, 89, 92, 105–6. Louis had a course of baths before he took the mineral water. Eventually in 1670 Vallot replaced the mineral with ordinary river and fountain water, supposedly because the latter had a more diuretic effect. The king had already had a course of Forges water in 1655 in an attempt to clear up a dose of gonorrhoea: ibid. 32.

can be no doubt that recourse to the knife remained the last resort of all. Louis XIV only agreed to subject his royal anus to the tender mercies of his surgeons at 8a.m. on 18 November 1686 after his physicians had spent a whole year trying to reduce the tumour by other means.[125] In the seventeenth century, moreover, the closure of an anal fistula by surgery, effected either by using a ligature or an incision, was one of the few major operations which was done relatively frequently and with success,[126] although it took Louis's bravura performance to make the operation distinctly popular. Thereafter courtiers and the sycophantic queued up to be cut. The Paris surgeon Pierre Dionis declared that he had seen thirty would-be martyrs 'whose stupidity was so great that they appeared angry, when we assured them that they had no necessity of undergoing [the operation]'.[127]

Most major operations, it must be stressed, including those whose technique had been theoretically known since antiquity, were hardly ever tried, and outside the capital few surgeons had the competence anyway. French surgery might have advanced considerably in the sixteenth and early seventeenth centuries, but the number of skilled practitioners was still very few.[128] In consequence, even so relatively straightforward an operation as mastectomy can have been seldom attempted in the provinces. In the late seventeenth century mastectomy was definitely performed in Paris, where its most prominent advocate was the court physician Jean-Adrien Helvétius.[129] But when Dionis advised the operation in the case of a lady from Marseilles, Madame de Montreuil, there was no one in the Mediterranean city capable of performing the excision. Eventually, the patient chose one Geofroy, an army surgeon, to excise the breast and Dionis instructed him (how is unknown) in the operative technique.[130]

The one operation that even skilled Parisian surgeons never attempted was a Caesarean on a live mother. Indeed, Dionis writing, it will be recalled, at the turn of the eighteenth century, dismissed all successful stories of the operation as old wives' tales. The only possibly truthful case he knew concerned a surgeon at Saintes, called Raleau, who had purportedly performed a Caesarean on the live wife of a merchant in 1689, although the baby died three days later. Raleau's

[125] Ibid. 167–73. At one stage it seemed likely that Louis, too, would visit Barèges; a surgeon was sent there to investigate the validity of the waters' reputation for curing anal fistulas and satisfied patients, like Hélie, were interviewed.

[126] Mme de Sévigné's cousin Count Bussy-Rabutin had an anal fistula closed in 1683: see Sévigné, *Lettres*, vii. 534–5: Bussy-Rabutin to Mme de Sévigné, 19 Dec. 1686.

[127] *Cours des opérations*, 280–91. Louis XIV's fistula was closed by an incision. The problem of using a ligature, Dionis explained, was that it only cut away the damaged flesh after a long time and had to be retied each day, which caused great pain (p. 288).

[128] On the developments in surgery in this period, see above, Ch. 2, Sect. B.

[129] See his *Lettre à M. Régis sur la nature et la guérison du cancer* (Paris, 1691).

[130] Dionis, *Cours des opérations*, 322–5; Dionis claimed the operation was a success.

claim was supported by the local physician, one Moreau, but the latter had admittedly not witnessed the delivery.[131] There is no reason to disbelieve Dionis's insistence that the operation was forbidden to members of the corporative medical community. No independent accounts of a Caesarean on a live mother have come to light, except one written down by a physician at Dieppe, Théophile Gelée (1566–1650), in 1612, from a story relayed by the surgeon Jean Clerel. However, the operation in this case, on a woman called Marion des Hayes living in the village of Neufville, a quarter of a league from Dieppe, was not really a Caesarean. Rather, two Dieppe surgeons, Jean Colat and David Canu, had been forced to deliver an aborted foetus by an incision of the womb, when the woman's body had attempted to evacuate the dead matter through her navel.[132]

The most common major operation, apart from the amputation of limbs on the battlefield (a technique perfected by Ambroise Paré)[133] was lithotomy, the location, then removal, of bladder stones by incision.[134] Nephritic complaints seem to have been commonplace in seventeenth-century Paris at least, and those who could not or would not put themselves under the knife could die in terrible agony, as was the fate of the great Colbert.[135] Throughout the period the operation, as we have seen, could be hazardous, but from the 1590s in the capital there was a growing number of lithotomy patients who survived to tell the tale. These included a number of members of the corporative medical community, notably L'Estoile's physician Hélin, who in September 1609 was successfully lithotomized for the third time at the age of 67.[136] Lithotomy, however, was an operation that even at the turn of the eighteenth century was still primarily in the hands of skilled empirics, such as the Colot family. Dionis claimed that the majority of surgeons were quite content that this should be the case: the operation should be left to 'those who make it their chief concern [*leur capital*], and who put all their efforts into becoming skilful at it'.[137] It was an operation, too, which Dionis recognized had not yet been properly perfected.[138] This was the

[131] Ibid. 112–22.

[132] Théophile Gelée, *Histoire rare et merveilleuse, mais véritable d'une femme du village de Neufville auprès de Dieppe, laquelle ayant porté son enfant mort en la matrice l'espace de six mois et demy, fut enfin heureusement delivrée par une incision faicte au costé du ventre* (Dieppe, 1622). The operation was successful.

[133] Paré's contribution to surgery is briefly described above, Ch. 2, Sect. B.

[134] The operation could only be performed on bladder stones.

[135] Lister, *Journey*, 16; Dionis, *Cours des opérations*, 237 (= 137): when Colbert's body was opened up, two large stones were found in his urethra; his case had been inoperable.

[136] L'Estoile, *Journal*, ii. 524. Riolan the Younger, it will be recalled, was lithotomized twice: see above, Ch. 2 n. 317. However, on the second occasion, it was apparently unwillingly: see Tallemant des Réaux, *Historiettes*, vii. 305.

[137] *Cours des opérations*, 127.

[138] The Paris and royal surgeon François Thévenin would insert a tap into the bladder rather than subject feeble patients to lithotomy: see ibid. 157.

reason why Frère Jacques, with his rapid and lateral operative technique took Paris by storm in 1697. If he lost all his credit when Saint-Simon's father-in-law died, Dionis conceded that the empiric's method needed to be perfected by a skilful surgeon, not discarded.[139]

There may well have been spectacular operations performed in sixteenth- and seventeenth-century France, but it can be assumed that their number were few. It would not be every day of the week that even a Paris surgeon of Saint-Côme would be called upon to undertake invasive surgery. Indeed, the number of major operations which surgeons like Dionis performed during their life may have declined as the seventeenth century went on. Dionis, writing at the turn of the eighteenth century, claimed that skilled surgeons had become less cruel in recent years. Not only had they given up the painful tradition of cauterizing the wound after amputating a limb, but amputation as a surgical solution was now recommended only reluctantly. Dionis and two other top surgeons had been on the most recent military campaign of the king's grandson, the duc de Bourgogne (father of Louis XV), and they had forbidden their army colleagues to amputate without their say-so.[140] In consequence, most trained surgeons, through relative ignorance and lack of demand, must have done little beyond letting blood, lancing boils, setting bones, and dressing wounds. In 1697 the Carpentras surgeon P.-A. Barjavel performed over 400 surgical operations but they were nearly all phlebotomies, thirty-four of the thirty-six in the month of May, for instance. It must have been a welcome relief when he was able for eight days in September to treat an inhabitant of a local village who had 'a wound on the right side of the chest three fingers in length and two in depth'.[141]

Given that apothecaries as well as surgeons were permitted to phlebotomize, it is not surprising that provincial surgeons were also barbers: combining the two trades can have been the only way of making a living.[142] If most surgeons, indeed all but the élite of the big cities, wanted a more demanding surgical career, then they had to develop a specialism. Few became specialist operators, lithotomists, or oculists, but sixteenth- and seventeenth-century surgeons did successfully carve out one niche for themselves: as venereal doctors. Possibly because venereal disease was something to be ashamed of and not a

[139] Ibid. 166–74. Lithotomy techniques are discussed below, Ch. 9, Sect. A. For Frère Jacques see above, Sect. A.

[140] Dionis, *Cours des opérations*, 504–8. Dionis followed Paré in closing wounds after amputation by ligature, but he noted that the surgeons at the Hôtel-Dieu used a vitriol dressing, not as painful as cauterization but still problematic.

[141] BM Carpentras MS 833, esp. fos. 40–2 and 45, Barjavel's account book 1697–9.

[142] Many may have been barbers first and surgeons second. See below, Sect. D. Even in towns with resident physicians, then, day-to-day contacts between surgeons and physicians must have been limited, thereby increasing the relative distance between the two communities we noted earlier: cf. Ch. 3, Sects. E and F.

proper subject for the afflicted to discuss man to man (or woman to man) with their cultivated, learned practitioners, the treatment of venereal disease, although an internal malady with external symptoms, quickly became the province of surgeons.[143] The care was standard by the seventeenth century: temporary incarceration (probably in the surgeon's house) and mercurial rubs to encourage salivation. It was only when mercury seemed to have failed that the victim approached the learned physician often anonymously. Riverius had a number of such patients, including one who consulted the Montpellier physician by letter and complained that after enduring mercurial rubs he had been left with terrible headaches. Riverius, as in all venereal cases, prescribed phlebotomy and purgation, followed by a specific of guaiacum wood and sarsaparilla, on the grounds that these vegetable sweating agents could lift a venereal malady where mercury had failed. He also suspected that the patient had a headful of mercury that needed decanting, which could be ascertained by the patient inserting gold leaf in his nose to see if it turned white, and ultimately removed by trepanning the skull to release the acrid humours.[144]

To conclude, the treatment that learned physicians and their assistants offered their patients seems to have followed closely the therapeutic parameters laid down in the faculties. Physicians were interventionist but conservative. The relative degree to which the sick might be purged or bled might depend on the patient's tolerance and the practitioner's whim, but essentially the physician only had a limited number of standard remedial treatments which were utilized in the vast majority of cases which came before them. It was only when a disease was contumacious that physicians began to display their individuality, as they ordered their patients to take their personally favoured specifics. As most patients had three or four serious cases of fever in their lives when they were laid low for several weeks, and the longer they lived the more prone they became to chronic complaints like the stone or arthritis, the apothecaries would not have been short of business. Surgeons, on the other hand, however well trained, would have had difficulty in finding many opportunities to display their creative talents, for few patients required complex or dangerous operations. Throughout his life Louis XIV was purged, clystered, and bled (against his wishes), and made to take an array of medicines, but he only suffered two major operations.[145]

[143] When Louis XIV went down with a dose of gonorrhoea, Vallot, in his written account of the treatment of the disease, claimed diplomatically to have no idea of the cause of the discharge and attributed it to too much vaulting and horse-riding(!): Vallot *et al.*, *Journal de la santé du roi*, 45.

[144] *Observationes*, 165.

[145] The second was in 1685 for a caries of the upper left jaw caused by clumsy extraction of teeth: see Vallot *et al.*, *Journal de la santé du roi*, 162–3. Purportedly in one year his father had been given 212 enemas and 215 medicines, and had been bled 47 times: ibid., p. xv.

Yet this was only the rhythm of learned medicine. Most patients were treated by semi-trained surgeons and apothecaries or unlearned empirics and their experience may have been very different. Certainly, the anti-empiric rhetoric suggested this was the case. Empirics were accused of turning the therapeutic world upside down, of failing to distinguish between diseases, of ignoring the relative strengths and weaknesses of particular manifestations of a malady, of neglecting the patient's individuality, of using violent remedies from the beginning, and so on. In the case of many rural healers, this may have been true. But, just as unlearned healers could ape the patient–practitioner ethics of their learned betters, so there is no reason to suppose they did not adopt similar rituals of healing, where they were in control of a disease from the beginning. Indeed, to the extent that this ritual of healing was understood by the (affluent) patient, then empirical healers would have had little choice but to work within its customary framework. Moreover, in one important respect it is definitely wrong to envisage learned and unlearned medical practice as two distinctive therapeutic worlds, for in either case the key to a practitioner's individuality qua practitioner (and doubtless to his fame in the wider community) lay in the use of personally favoured specifics. Since extremely erudite and highly thought-of practitioners, like Riverius, could keep their personal concoctions out of the public domain, they verged on hypocrisy when they treated unlearned empirics with their secret remedies as a race apart. All practitioners, faculty professors as well as wise women, were guardians of medical mysteries, promoters of arcane cures: hence the ease with which an apparently efficacious secret remedy from inside or outside the corporative community, such as Tabor's quinine febrifuge, could be adopted by the learned physicians, once its ingredients had been revealed.[146] It may be, then, that qualified and unqualified practitioners usually ministered to a different circle of clients, but it is likely that the type of medical practice on offer to both high and low was much more homogeneous than one might initially suspect.

D. Practitioner Wealth

From what has been said in the previous sections, it can be surmised that few medical practitioners, trained or untrained, licensed or unlicensed, made a great

[146] Apparently D'Aquin knew Tabor's secret as early as Oct. 1679 (i.e. only a short time after he had arrived at court) and a year later its method of preparation was known to a number of royal doctors (including Fagon); indeed, the premier physician was supposedly prescribing the drug: see *Mercure galant*, Oct. 1679, p. 169, and Oct. 1680, p. 272 ff. If this is true, then presumably at this juncture the court doctors were unwilling to try out the remedy on members of the royal family, for in Nov. 1680 it was Tabor, not the learned physicians, who would 'save' the dauphine by administering quinine: see above, Sect. A.

deal of money out of their career. Patient–practitioner ethics, the longevity of many diseases, even the conservative nature of medical treatment, all militated against the purveyors of medical services maximizing the number of sick they attended and charging large sums for their care. Members of the corporative medical community especially would have been kept relatively busy but the return can be presumed to have been modest. This is not to say that medical practitioners were paupers, no better off than the average peasant or artisan. As we saw in an earlier chapter, this was certainly not the case, for a medical career was frequently the key to steady, if not usually rapid, social progress. Many apothecaries and surgeons made enough money to turn one or more of their sons into physicians, while some physicians did very well for themselves, accumulating enough capital to purchase medical positions at court and eventually buy for their sons ennobling offices in the *parlements*. Although there was a tendency for the different sections of the corporative medical community to be self-perpetuating, the system was far from being completely ossified.[147] Of course, many well-to-do medical practitioners may have gained much of their wealth from inheritance, especially through an opportune marriage to the daughter of a wealthy member of the local urban community. But even if this were the case, the fact itself testifies to the material possibilities of a medical career, especially in physic. Rich merchants or lawyers might marry their daughters to indigent noblemen for simple status reasons, but not to indigent physicians. The possible role of inheritance in building up practitioner wealth should merely lead us to expect that the actual fortunes of medical men plying the same trade in the same town might be radically different.

Such assumptions are borne out by our detailed, if limited, knowledge of the wealth of members of the corporative medical community. Surgeons and apothecaries may have been artisans but in general they were definitely comfortably off, economically comparable with representatives of the most lucrative urban trades. At Lyons in the mid-sixteenth century, for instance, tax records reveal that surgeons fell into the same economic category as innkeepers, printers, and furriers.[148] Nothing had changed by the turn of the eighteenth century. Artisans at Reims in 1701 paid on average a *capitation* (a new royal tax of the 1690s based on income) of 13 to 15 sous. No surgeon or apothecary in the town, however, was assessed at less than 30 sous, and some were clearly very well heeled, notably the apothecary Jacques Caillet, and the surgeon Marc Antoine, who paid 26 *livres* 6 sous and 35 *livres* 14 sous respectively.[149] Antoine was presumably not as rich as the Parisian apothecary in the 1690s, Matthieu-François

[147] See above, Ch. 3, Sect. D: the ex. of the Parisian Seguin family.

[148] A. K. Lingo, 'The Rise of Medical Practitioners in Sixteenth-Century France: The Case of Lyon and Montpellier', Ph.D. diss., Univ. of California, 1980, pp. 77–8.

[149] AM Reims R *fonds ancien* 591, *capitation* register for 1701, esp. fos. 58r and 73v.

Geoffroy, who owned a veritable *hôtel* in the capital and rose to be *prévôt des marchands* (or mayor),[150] but he must have been an important figure in local Rémois society.

It is impossible to judge how many *livres* such urban fat cats were able to gross a year but it must have run into several thousands at a period when most other artisans earned only 100 to 250.[151] On the assumption that the *capitation* figures given above bear a reasonably close relationship to the differences in real income, then even the poorest surgeons and apothecaries must have received an income of upwards of 400–500 *livres* in the reign of Louis XIV. In the case of many surgeons, however, an important part of this sum would have come from plying their trade as barbers. Those surgeons who were little more than phlebotomizers—and this would have been frequently the case when a surgeon was just starting out—could not have expected to gain much money from their art. Barjavel of Carpentras, who set up his shop in September 1694, only charged 5 sous for bleeding a patient's arm, 15 sous for bleeding a foot, and 5 sous for extracting a tooth.[152] As a result, he only gained 90 *livres* in 1699 from his surgical business, which was totally insufficient to maintain a growing family.[153] The shortfall could only have been made up by shaving—a service for which he charged 6 *livres* per person per annum—and cutting hair.[154]

However, if surgeons and apothecaries were usually comfortably off, they were not generally as economically well placed as their physician superiors: the status hierarchy of the corporative medical community was unsurprisingly largely mirrored in the economic circumstances of its members. At Lyons in the mid-sixteenth century the physicians on average were twice as wealthy as the apothecaries, while at Reims at the end of the period they had an income two and a half times that of the surgeons.[155] But again there could be great discrepancies within the same corporation. At Lyons in 1544 all but one graduate physician was to be found among the most wealthy 10 per cent of the population, but at

[150] Geoffroy's *hôtel* is described in Lister, *Journey*, 238–9. For the family, see above, Ch. 3, Sect. D.

[151] See the discussion in P. Goubert, *Beauvais et le Beauvaisis de 1600 à 1730: Contribution à l'histoire sociale de la France au XVIIe siècle* (2 vols.; Paris, 1960), i. 291–9.

[152] BM Carpentras MS 833, pp. 63 ff.; when the blood was blue the patient paid more: e.g. the phlebotomy performed on the arm of the chevalier de Darou for 1 *livre* 2 sous (p. 67). Barjavel only reveals the date he set up his business on p. 167.

[153] Ibid. 71–82: this is the only year for which he gives figures. He had five children by 1704 (pp. 100–1). At the same date a top Paris surgeon could receive 2,000 *livres* for a single major operation: see below, n. 177.

[154] BM Carpentras MS 833, pp. 93 ff.: a list of those he engaged to shave, 1694–9: unfortunately, he gives no details of his income from his barber's business. By the late 1700s he was also moonlighting as an apothecary (p. 111).

[155] Lingo, 'Medical Practitioners', 63; AM Reims *fonds ancien* 591: average *capitation* assessments of 27 and 11 *livres*.

Montpellier a year later there were large variations in wealth among the Faculty doctors and a few could even be classed as indigent.[156] The same was true at Paris in the century 1550 to 1650. A study of physicians' wealth on their death reveals that a quarter of the capital's doctors could be classed as rich, but two-fifths had no servants, a third no urban or rural property, a fifth no silver or jewels, and a ninth no books. Even those who eventually acquired riches seem to have done so slowly. Thus Simon Pietre who died in 1584 had been married twenty-seven years and had had eleven children before he bought a house in 1579 for 482 *livres*.[157] Equally wide too were the discrepancies in wealth between the six physicians at Reims at the turn of the eighteenth century. According to the *capitation* register of 1701, the wealthiest physician, one Gilles Culoteau, was twenty times better off than his poorest colleague, Girard Le Frique, assessed at a mere 3 *livres*, a much lower sum than virtually all the town's surgeons and apothecaries.[158]

In consequence, all but the most unfortunate and younger physicians probably earned at least 1,000 *livres* each year from their profession. Sought-after physicians in private practice in the provinces and the capital definitely did considerably better. Thus, one Petit of Guyenne at the turn of the seventeenth century seems to have been in receipt of 5,000–6,000 *livres* per annum,[159] while the Parisian Faculty doctor Eusèbe Renaudot (d. 1679), son of the more famous Théophraste, received 7,500 *livres* from his clients in 1666.[160] Both men enjoyed a higher income than 60 per cent of the French nobility could command in the eighteenth century.[161]

In theory, of course, a busy physician like Eusèbe Renaudot ought to have earned considerably more, for even if he only attended twenty patients a day and charged on average less than 1 *livre* per visit, the potential reward was

[156] Lingo, 'Medical Practitioners', 47–51. At Montpellier where the highest tax assessment in 1545 was 566 *livres*, some doctors only paid 5.

[157] F. Lehoux, *Le Cadre de vie des médecins parisiens au XVIe et XVIIe siècles* (Paris, 1976), esp. 91, 288, 298–9, 347, 462: information derived from a study of *inventaires après décès*. This unique work is an extremely meticulous study of material concerning Paris physicians in the capital's notarial archives. Its richness cannot be conveyed in a few lines.

[158] AM Reims *fonds ancien* 591. Assessments of 3 *livres* and 67 *livres* (fos. 21^v and 84^v): Culoteau in the course of his life accumulated many dignities: dean of the Reims college, physician ordinary to the king and *conseiller du roi*, assessor for the local *marachaussée* (mounted police force), and the rank of an *écuyer* or nobleman. Le Frique was probably the son of another Reims physician and had just begun his medical career.

[159] L'Estoile, *Journal*, ii. 533. In 1609 Petit temporarily became the king's premier physician. His income was not necessarily, of course, all from his practice.

[160] [Eusèbe Renaudot], 'Journal d'Eusèbe Renaudot: Régent en médecine à Paris 1646–1679', ed. C. Tronson, *Mémoires de la Société de l'Histoire de Paris et de l'Île de France*, 4 (1877), 252–6: this is both a diary and an account book. For Théophraste Renaudot, see below, Sect. E.

[161] G. Chaussinand-Nogaret, *La Noblesse au XVIIIe siècle: De la féodalité aux lumières* (Paris, 1976), 77.

significantly higher.[162] That the income from his practice was relatively unspectacular reflected his unwillingness to present his most aristocratic clients with a bill for his services: he frequently looked after the bodies of the well-born and the well-placed for the simple honour of the service. One of his clients, for instance, was the archbishop of Paris Péréfixe, who died in 1672. Renaudot had treated the prelate for thirty years and neither asked nor received a sou from his ecclesiastical patient until January 1671, when Péréfixe gave the physician's wife a purse containing 1,000 *livres*.[163] Eusèbe Renaudot, then, certainly deserved the diamond cross and ring worth 2,000 *livres* he was bequeathed in the archbishop's will.

Renaudot's willingness to treat aristocratic clients for little immediate material reward was doubtless a professional trait. In a patronage society dominated by vertical ties, the continued protection and favour of a significant figure at court, a *parlementaire*, or municipal bigwig was much more valuable than cash in hand. It ensured a perpetual supply of clients from among the patron's other *créatures* and probably guaranteed that less prestigious patients would pay their bills, even if the patron did not. It also opened up the possibility of honours, rewards, and perquisites finding their way to other members of the family in due course. Physicians who were set on the social elevation of their family needed more than money to achieve their ambition.[164]

Among private practitioners within the corporative medical community, physicians such as Renaudot were at the top of the economic ladder. If members of the community, be they apothecaries, surgeons, or physicians, wished to earn more, then they had to supplement their private practice by other means. There were various ways of doing this—holding a university chair or hospital post, for instance—but the only means of augmenting one's income considerably was to purchase or be granted a medical office in the royal entourage.[165] Indeed, service

[162] We know very little about the cost of a consultation or visit before the late 17th cent.; by then an affluent artisan could expect to be charged 15 sous: e.g. *Mémoires ou livre de raison d'un bourgeois de Marseille 1674–1726*, 59: the anonymous *bonnetier* paid the physician Pelicely 9 *livres* for 12 visits.

[163] [Eusèbe Renaudot], 'Journal', 262–3. Admittedly, other bishops who were his clients (Albi, Noyon, and Uzès) paid him more regularly. It is impossible to tell from this diary how much Renaudot charged aristocratic patients per visit, or indeed if he ever presented a bill.

[164] Much has been written in recent years on the role of patronage in 17th-cent. French society. For a good introd., see S. Kettering, *Patrons, Brokers and Clients in Seventeenth-Century France* (Oxford, 1986).

[165] Hospital positions seldom brought the holder more than 200 *livres* p.a. in this period. Professorial chairs could pay more, but the most rewarding, those attached to the Paris Collège Royal, were only worth a maximum of 1,200 *livres* p.a.: see A. Lefranc, *Histoire du Collège de France depuis ses origines jusqu'à la fin du Premier Empire* (Paris, 1893), 244, 250 n. 2. The surgeon of Saint-Côme, Séverin Pineau (d. 1619), was supposedly given 6,000 *livres* by Henry IV to instruct ten capable men in the art of lithotomy, at that time, it will be recalled, a very recherché skill: BFMP MS 2115, p. 185 (Delanoue's journal): for the incident, see above, Ch. 3, Sect. E.

at court was the one path, not just to a modest or even affluent lifestyle but to untold riches, so much so that medical members of the royal household were in a different economic league to their corporative colleagues in purely private practice.

This was true throughout the period. In the mid-sixteenth century the great Fernel purportedly earned 10,000–12,000 *livres* per annum from his practice, and when he died in 1558 the annual overall value of his estate was said to be three times this sum.[166] A century later, after the great inflation, Fernel would have been worth four or five times as much, so that the boast of Louis XIV's premier physician François Vautier in 1648 that he was worth 75,000 *livres* per annum (a vertiginous income) is not implausible.[167] Moreover, royal surgeons and apothecaries, not just physicians, found the court a passport to exceptional wealth. When Boorii, apothecary to the queen's ladies-in-waiting (not even apothecary to the queen), died in 1609 he left a fortune of 150,000 *livres*.[168] It is no surprise, then, that royal physicians like the Seguin could purchase ennobling offices for their sons in the Paris Parlement, or that others like D'Aquin coveted lucrative bishoprics for their offspring.[169] By obtaining access to the court, they ceased to rank economically as bourgeois and could rub shoulders with the richest in the land: in the reign of Louis XIV several *ducs et pairs*, France's 70-odd wealthiest aristocrats, could not have matched Vautier's income.[170]

Court doctors did not become rich because of their salaries. Royal medical offices seldom brought in more than 2,000 *livres* per annum and the salary due was often infrequently paid: in the mid-seventeenth century the eight physicians ordinary of the king, serving by quarter, supposedly received virtually nothing for ten years.[171] Incumbents, then, did not pay upwards of 20,000 *livres* in the second half of the century for their post out of the expectation that the office itself would be lucrative.[172] Rather, they paid the money for the way the office could be milked.

[166] Pierre Bayle, *Dictionnaire historique et critique* (4 vols.; Rotterdam, 1720), ii. 1163 n. 1. Fernel left 90,000 *livres* in specie in his study.

[167] Patin, *Lettres*, ii. 396–7: to Spon, 29 May 1648.

[168] L'Estoile, *Journal*, ii. 478–9.

[169] See Sect. B and above, Ch. 3, Sect. D. In the mid-17th cent. the office of *conseiller* at the Paris Parlement cost 120,000 *livres* and a more humble position of clerk at the Châtelet as much as 30,000 *livres*: see R. Mousnier, *La Vénalité des offices sous Henri IV et Louis XIII* (Paris, 1971), 356 ff.

[170] The income of the *ducs et pairs* in the 17th cent. varied between 50,000 and 250,000 *livres* p.a.: see J.-P. Labatut, *Les Ducs et pairs de France au XVIIe siècle* (Paris, 1972), 239–320.

[171] Patin, *Lettres*, ii. 327–8: to Spon, 30 Nov. 1655.

[172] The Paris physician Jean Baptiste Chomel (1639–1720) paid Philippe Chartier (d. 1669) 24,000 *livres* for the office of physician ordinary to the king in 1669 and sold it to his son Pierre-Jean-Baptiste Chomel (d. 1740) in 1706 for 22,000: see D. Sturdy, 'Pierre-Jean-Baptiste Chomel (1671–1740): A Case Study in Problems Relating to the Social Status of Scientists in the Early

In the first place, being a medical practitioner was prestigious; it enhanced one's reputation as a private practitioner, even if the king did not specifically command his courtiers to consult with his medical entourage.[173] Secondly, for practitioners who did not belong to the Paris corporative medical community, court office brought a legal entrée to the lucrative Parisian market.[174] What is more, the salary was only part of the employment package. When Eusèbe Renaudot became chief physician to the dauphin in 1672, his salary was only 1,800 *livres*, but he was also given an annual pension of 8,000 *livres*, plus a variety of fringe benefits (including a clothes allowance and a daily bottle of wine) which brought the immediate value of the office to 13,000 *livres* per annum.[175]

Above all, royal doctors became rich from the frequent one-off gifts they received for a particular medical service. The most famous example of royal munificence was the sums paid out by Louis XIV on the closure of his anal fistula. All the medical practitioners involved were amply rewarded. Louis's premier surgeon Félix received 150,000 *livres*; the surgeon who actually performed the operation, Jacques Beissier or Bessière (1623–1712), 40,000; and Félix's surgeon's boy 4,400. The attendant physicians, who presumably merely watched, did just as well: D'Aquin, the premier physician, was given 100,000 *livres*, and Madame de Maintenon's favourite, Fagon, 80,000. Even the apothecaries who treated the subsequent wound were not forgotten, each of the four being given 12,000 *livres* for their pains.[176]

Treating a royal body in crisis, then, was the real foundation of a court doctor's wealth, especially when a dangerous operation was called for. Merely operating on a royal bastard could be highly rewarding: Félix's successor as Louis's premier surgeon, Mareschal, received 30,000 *livres* from the king for lithotomizing the comte de Toulouse in 1711.[177] Unsurprisingly, helping to deliver royal babies was particularly good business. Even in the mid-sixteenth century Fernel supposedly received 30,000 *livres* on each occasion for his presence at the confinement of the four male children of Catherine de' Medici.[178] But equally inevitably the midwife who did the work received a relatively meagre reward. It

Modern Period', *British Journal for the History of Science*, 19/3 (1986), 303 and 305. At the beginning of the century in the midst of the great inflation the price had been much less: the Paris Faculty physician René Chartier (1572–1654), father of Philippe, had bought the same office for 4,200 *livres* in 1609, then sold it to his son in 1635 for 12,000: see Lehoux, *Cadre de vie*, 335. But note the price Pierre Seguin had supposedly paid for a similar office at this date: see above, Ch. 3, Sect. D.

[173] As he did in Fagon's case: see above, Sect. B.

[174] See above, Ch. 4, Sect. B. [175] [Eusèbe Renaudot], 'Journal', 265.

[176] Dionis, *Cours des opérations*, 290.

[177] Saint-Simon, *Mémoires*, iii. 1103. Mareschal was earlier given 2,000 *livres* by the king for lithotomizing Fagon, though this was a sum the premier physician had offered the surgeon himself and perhaps suggests the going-rate for the operation in court circles at the turn of the 18th cent.

[178] Bayle, *Dictionnaire*, ii. 1164 n. 1.

is impossible to know what Louise Bourgeois was given on each occasion for attending the six deliveries of Marie de' Medici, but it would seem that it was only after the last in 1609 that she was granted an annual pension, and then only a paltry 1,800 *livres*.[179]

A small coterie of court practitioners, therefore, made their corporative colleagues look like poor country cousins.[180] It is also possible that the large majority of the corporative medical community were put in the economic shade by the most successful members of the medical penumbra. In most cases it can be assumed that untrained healers received little reward from their medical activities: after all most were do-gooders, Ladies Bountiful, seigneurs, or members of the clergy, offering their services free or for next to nothing. Thus, a famous peasant healer of cancers and ulcers in the 1690s, one Christophe Ozannes, may have charged for his consultations (30 sous or 3 *livres* dependent upon the client), but he insisted the money was put in the poor box. Moreover, when a grateful rich client tried to give him 100 *pistoles* (1,100 *livres*), he purportedly sent the money back.[181] However, the penumbra did comprise an unknown number of 'professional' charlatans, out to make a living from their miraculous pills and potions, figures like Hieronimo di Bolonia and the *orviétan* salesman Désiderio Déscombes.[182] Presumably, a handful of these at least made a handsome return from their trade, especially those who wormed their way into the court and obtained a licence to peddle their wares. It should be remembered, too, that the classic charlatan was an itinerant, selling patent medicines and medical advice like any other street-hawker, then moving on. Not only was he collapsing into one the roles of physician, apothecary, and even surgeon, but he did not waste his time visiting patients and watching over their progress; he had reduced medical care to a commercial transaction.

On the other hand, the number of untrained practitioners who made a fortune out of medicine must have been very small. Learned physicians certainly did not think that the wages of medical sin were riches. Charlatans were notorious for losing their wealth as fast as they gained it. According to the Montpellier physician Jean Bernier, no lover of the empirical interloper as we have seen, of

[179] Bourgeois, *Récit véritable de la naissance*, 153.

[180] Of course, the crown's behaviour was aped by the aristocracy and even bourgeois, so well-placed private practitioners too received one-off gifts. But the rewards were much smaller. Ambroise Paré throughout his career was given many thank-you presents by grateful clients in the form of money and jewels, but their value was measured in hundreds not thousands of *livres*: e.g. the 50 double ducats (*c.*300 *livres*) he received in 1543 on parting from the duc de Rohan: see his 'Apologie et traicté contenant les voyages faicts en divers lieux', in Paré, *Les Œuvres*, 784.

[181] Sévigné, *Lettres*, viii. 350–1: M. de Coulanges to Mme de Sévigné, 27 Jan. 1696. He charged the rich the cost of his remedies, but the poor paid nothing; his clients included the duc de Gramont.

[182] See above, Ch. 4, Sect. B.

the great seventeenth-century charlatans only Semini (whose skill supposedly brought Mademoiselle de Nevers back from the dead) had died wealthy.[183] The wealthy empiric, then, was probably not the run-of-the-mill charlatan-cum-mountebank but the extremely fortunate and uncommon boundary-breaker, who managed to cure members of the aristocracy or royal family *in extremis*, then consolidated his positive image by perhaps revealing the contents of his secret efficacious specific.[184]

In an age, therefore, when most people believed that sinners received their due reward in this world as well as the next, members of the corporative medical community were unlikely to have had their self-esteem and their concept of propriety seriously disturbed by frequent encounters with wealthy boundary-breakers. Just as empirical doctors were of limited economic concern to members of the corporative community because they generally served sections of the population the corporative community largely ignored, so their paltry reward must have helped to confirm in the community's eyes that the medical penumbra really was filled with ignorant incompetents. What disconcerted trained practitioners before 1700, it appears, was not the fabulous wealth of unlearned empirics, but the unseemly riches of the lucky few in the corporative community who had climbed aboard the fast-moving gravy-train of the court.

E. The Court and the Capital

Insiders within the corporative medical community always reacted negatively to the phenomenon of the plutocratic court practitioner. To the extent that there was no prima-facie evidence that the court doctor was a better practitioner than his less affluent colleagues, it was automatically assumed that his riches were the result of greed and graft, behaviour completely unbecoming for a trained practitioner.[185] Gui Patin in particular had nothing good to say about court doctors, even those (a limited number in his eyes) who were ideologically sound, such as Louis XIII's erstwhile premier physician Charles Bouvard, described in 1656 as originally an excellent man but corrupted by the court, like so many others.[186] In

[183] *Histoire cronologique* [*sic*] *de la médecine et des médecins où il est traité de l'origine, du progrès, & de tout ce qui apartient* [*sic*] *à cette science* ... (2nd edn., Paris, 1695), 278 (1st pub. date unknown). On the fecklessness of charlatans, see Thomas Platter's comments on one Zan Bragetta encountered at Avignon in 1598, in his *Journal of a Younger Brother*, 181–3. For Bernier, see above, Ch. 4, Sect. A.

[184] Unfortunately, virtually nothing is known about the wealth of empirics. For the prosperity of the *orviétan* salesman Christophe Contugi on his death, see above, Ch. 4, Sect. B.

[185] To an Augustinian Thomist Aristotelian greed would inevitably warp professional judgement.

[186] *Lettres*, ii. 243: to Spon, 3 Mar. 1656. For Bouvard's place among the medical angels, see esp. ibid. i. 453: to Spon, 18 June 1649.

the first half of the seventeenth century the corporative community's dislike of court practitioners was part of a wider societal hostility to the court which embraced disgruntled aristocrats, provincial nobles, municipal élites, and royal *officiers* and led eventually to the civil wars of the Fronde. Gui Patin hated the cardinal-ministers Richelieu and Mazarin as much as he disliked court physicians.[187] But in the case of members of the Paris Faculty anti-court feeling was additionally fired by the winds of economic competition. As the period progressed, the venal court practitioner ceased to be just a disturbing moral exemplar at the apex of the corporative hierarchy and became also a licensed professional rival.

From as early as 1504 royal physicians who were not members of the Paris Faculty were permitted legally to practise in the capital when the court was resident there. In the sixteenth century this privilege was not problematic, for the court was seldom in the capital for long periods of time and the royal medical entourage was small. After 1600, however, the court became permanently located at Paris (until it moved to Versailles in the 1680s) and the number of practitioners of all kinds serving the royal family climbed swiftly.[188] As many, if not most, of the resident court physicians were not members of the Paris Faculty but had degrees from Montpellier or less prestigious universities, there were quickly a number of *médecins étrangers* or 'foreign' graduates practising in the capital and threatening the faculty's market.[189] Moreover, with the sedentary court came problems of definition: who exactly was entitled to the privileges of a court physician? Those who served the king, queen, and royal children obviously deserved the sobriquet, but what of the stipended physicians to royal bastards, members of the junior Bourbon line, and even simple aristocrats living in their smart *hôtels* in the Marais? The establishment of a permanent court at the Louvre and the insistence that the great nobles of the land made their home in the capital guaranteed that seventeenth-century Paris was bustling with graduate physicians claiming the right to practise in Paris irrespective of the Faculty's monopoly.[190]

In the first decades of the seventeenth century, the Paris Faculty seems to have been able to live with this inflating phalanx of learned intruders. Ostensibly, at

[187] Ibid., *passim*. On the wider hostility to the court, see esp. A. Jouanna, *Le Devoir de révolte: La Noblesse française et la gestation de l'état moderne 1559–1661* (Paris, 1989); C. Jouhaud, *Les Mazarinades: La Fronde des mots* (Paris, 1985).

[188] For details, see above, Ch. 4, Sect. B.

[189] In the 17th and early 18th cents., a Paris graduate only held the office of the king's premier physician from 1628–46 (Bouvard and Jacques Cousinot) and from 1693–1715 (Gui-Crescent Fagon).

[190] The privilege of court physicians to practise in Paris was confirmed in the Faculty statutes of 1601, but there is no precise definition of who was to enjoy this right: see *Réformation de l'université de Paris* (Paris, 1601), 85–6 (art. xi).

any rate, what disturbed the faculty in the reign of Henry IV was the presence at court of learned, heterodox neo-Paracelsians—notably Joseph Duchesne or Quercetanus and his Protestant ally, the Montpellier graduate Théodore Turquet de Mayerne—not the permanent rivalry of royal physicians *tout court*. Thus, an attempt was made to stop the neo-Paracelsians practising in the capital—from April 1604 Faculty physicians were forbidden to consult with the heretics on pain of deprivation—but no other learned physicians in the royal entourage came under attack.[191] The declining influence of neo-Paracelsians at court after 1610, moreover, brought peace and no further learned court physicians were the focus of Faculty ire for the next two decades.[192] If the Faculty did move against a number of court practitioners in this period, then they were always unlearned empirics whose right to benefit from the 1504 decree was clearly questionable.[193] A notable victim was the royal almoner Gabriel de Castaigne, who claimed to practise legally as he was physician to the prince de Conti (a junior Bourbon), but who was attacked on several occasions not just as a hermetic but also an illegal practitioner, a cleric with no medical qualification.[194]

From the 1630s, however, the tension between the Paris Faculty and the foreign court physicians became acute, as the latter began to organize themselves into a distinct coterie. More importantly, they also began to offer protection to an indefinite number of real boundary-breakers: graduate physicians from other faculties who had no obvious connection with the court at all but who fancied practising in the lively and fast-growing capital without paying the exorbitant entrance fee of taking a Paris degree.[195] In the 1630s the challenge to the Faculty's monopoly was associated particularly with the activities of the Montpellier physician Théophraste Renaudot, who had become royal physician-extraordinary in

[191] See BFMP MS 9, fo. 353: minute 12 Apr. For the Paracelsian views of Duchesne, see above, Ch. 2, Sect. D. The attack on court Paracelsianism began with the investigation of Duchesne's *Liber de priscorum philosophorum verae medicinae materia* (S. Gervasii, 1603) in Aug. 1603: see BFMP MS 9, fos. 318 ff. The attempt to ostracize Duchesne and Turquet failed and Henry IV insisted that the rights of his two physicians were duly recognized: see BFMP MS 10, fo. 67: minute, 18 Oct. 1607.

[192] Duchesne was already dead and Turquet moved to England to become physician to James and later Charles I.

[193] The Faculty, of course, generally left empirics alone, arguably on the grounds that they were not an economic threat: cf. above, Ch. 4, Sect. A.

[194] See esp. BFMP MS 11, fos. 10–13, minute of 7 Nov. 1612. Castaigne had been censured for his hermetic treatise *L'Or potable* in Oct. 1611: see above, Ch. 2, Sect. D. He was banned from practising by the Châtelet.

[195] For the cost of a Paris degree, see above, Ch. 3, Sect. D; it served as an effective restrictive practice. It must be said that at the very beginning of the 16th cent. there is evidence from the Faculty minute-book that graduates of other faculties did sometimes challenge the Faculty's monopoly: see the case of Pierre de Gorris of Ferrara in 1511, in *Commentaires de la faculté de médecine de l'université de Paris (1395–1516)*, ed. E. Wickersheimer (Paris, 1905), p. lxxiv. Thereafter, however, the Faculty's right was respected by corporative colleagues until the 1630s.

1612.[196] Renaudot, a former Huguenot and a client of Richelieu, was an important figure in the capital and at court in the 1630s as the founder-editor of the *Gazette*, the crown's propaganda organ and France's first newspaper. He was also the founder-administrator of the Paris Bureau de prêt and Bourse de travail, a cross between a government pawn-shop and an employment agency. Renaudot used this institution as a locale for providing free consultations for the poor and established within its portals a weekly *cabinet de conférences* or scientific club, where savants, especially learned physicians from the provinces, could meet together to discuss medical and scientific problems.[197] Little is known about the medical graduates who attended the *conférences*, but one was the Montpellier graduate and Protestant Isaac Cattier, a native of Paris, but someone obviously barred by his religion from entering the sacred portals of the Faculty.[198]

It is not difficult to see why Renaudot's Bureau attracted the Faculty's ire. Renaudot had turned the Bureau into a rival medical college and set himself up as the defender of learned interlopers.[199] In addition, he was a heterodox practitioner. Not only was he suspect in the eyes of certain Faculty doctors for his support for chemical remedies (championed more quickly at Montpellier, it will be recalled),[200] but he seemed to have turned medicine into a trivial, commercial art by encouraging patients to consult by letter using simple, mass-produced images of the human body on which they could plot their symptoms. Unfortunately, however, Renaudot was extremely difficult to eliminate because of his high standing with Richelieu. Until the cardinal's death in late 1642 the campaign against him got nowhere. In the Mazarin era, on the other hand, he lost his patron and in March 1644 the Paris Parlement declared that the gazetteer was guilty of erecting a rival college to the prejudice of the Faculty's rights.[201]

The destruction of Renaudot's Bureau only poured oil on the flames. Renaudot and his friends had not been left to face the anger of the Faculty alone, for they had received support in the case before the Paris Parlement from the

[196] The best account of Renaudot's life remains H. M. Solomon, *Public Welfare, Science and Propaganda in Seventeenth-Century France: The Innovations of Théophraste Renaudot* (Princeton, 1972). In 1612 Renaudot was still a Protestant practising in Loudun, where he had come to Richelieu's notice; the office with a stipend of 800 *livres* p.a. seems to have been purely honorary.

[197] Renaudot claimed that the majority were from Montpellier: see his *Factum du procez d'entre maistre Théophraste Renaudot, docteur en médecine de la faculté de Montpellier ... contre les doyen et docteurs en médecine de la faculté de Paris* (Paris, n.d. [1640?]).

[198] See Patin, *Lettres*, ii. 138–9: letter of 9 June 1654. Cattier was the author of a treatise on the waters of Bourbon-L'Archambault published in 1650.

[199] He claimed that anyone had the right to practise in the capital if they had a diploma: see Théophraste Renaudot, *Remarques sur l'avertissement à Monsieur Théophraste Renaudot, portées à son autheur par Maschurat compagnon imprimeur* (Paris, 1641), 23.

[200] See above, Ch. 2, Sect. D, and Sect. E, *passim*.

[201] *Arrest de la cour de Parlement ... contre Théophraste Renaudot* (Paris, 1644). This brochure contains the *plaidoyers* of the lawyers as well as the judgement of the court.

Montpellier Faculty. This development was inevitable. The Montpellier Faculty had always claimed that its graduates had the right to practise freely anywhere in the world, so understandably it lent its support to a group of its children in trouble. When the Paris Parlement came out on the side of the Paris Faculty, the Montpellier professors refused to give up. Abandoning the courts, they presented their case before the bar of public opnion. What had been a legal quarrel between the medical college and a handful of illegal learned practitioners turned into a war of words between the two leading medical faculties in the country.[202]

The campaign was launched in October 1644 when the dean of the Montpellier Faculty, Simeon Courtaud, gave a lengthy oration at the beginning of the academic year defending the right of Montpellier graduates to practise in the capital without belonging to the college.[203] Published with a dedication to the dead cardinal's mortal enemy, Louis XIII's brother Gaston d'Orléans, the speech gave birth to a war of polemics which lasted ten years. The battle essentially raged around the historical rights of the two faculties, and much ink was spilt trying to establish whether Paris or Montpellier was the elder and whose graduates therefore took precedence. Ultimately, however, the historical argument did nothing to weaken the clear-cut legal rights of the Paris college. It was doubtless for this reason that the supporters of the Montpellier Faculty took to accusing the Paris physicians of therapeutic conservatism on the grounds that they had turned their backs on the benefits of chemical medicine developed by Paracelsus and his followers. As we have seen, this was unfair: by the mid-seventeenth century most of the Paris Faculty did accept antimony and other chemical remedies.[204] Nevertheless, as an accusation it had a ring of truth about it, and was a useful rhetorical ploy, one that was difficult for the Paris physicians to answer in a manner that would satisfy both the pro- and anti-chemical factions within the college. Jean Riolan the Younger, for instance, a long-standing opponent of neo-Paracelsianism, had to square the circle by introducing a geographical distinction into the debate. Repeated phlebotomies and the use of metallic purgatives, he maintained, were both justified. It was a question of race and geography. Germans could be purged violently because they had 'robust,

[202] Interestingly, in the 18th cent., when relations between the two faculties were more cordial, Montpellier tried to play down the support it had given the gazetteer. According to the Faculty's 18th-cent. historian Astruc, the initiative had come from the dean, and the other professors had disowned his action in June 1646: see Jean Astruc, *Mémoires pour servir à l'histoire de la faculté de médecine de Montpellier* (Paris, 1767), 262.

[203] Simeon Courtaud, *Monspeliensis medicorum universitas, oratio pronunciata die vigesima prima mensis octobris anni MDCXLIV*... (Montpellier, 1645).

[204] See above, Ch. 2, Sect. D. Significantly, Renaudot attacked the Faculty not for its hostility to chemical *metalla* but for its inability to present a unified front: see Théophraste Renaudot, *Factum de procez d'entre maistre Théophraste Renaudot*.

debauched bodies, filled with phlegm', but not the French. At the same time, people in the south of France had to be treated differently from Parisians. The *gens du midi* lived soberly, while the Parisians were 'lazy, great meat-eaters, [and] abundant in blood', so had to be bled abundantly.[205]

By the mid-1650s, however, the attempt to turn the quarrel into an inter-faculty dispute had petered out. Doubtless by then the fight had lost much of its point. Renaudot died in 1653, while his two sons Eusèbe and Isaac had been permitted to graduate as doctors of the Paris Faculty in 1647 and 1648.[206] Nevertheless, the threat to the Paris college's monopoly by individual interlopers continued. After Renaudot's death the provincial physicians were leaderless, but by the late 1660s they found another forceful champion in Charles de Saint-Martin.[207] In 1668 Saint-Martin went one stage further than the gazetteer and persuaded the royal council to allow foreign graduates resident in the capital, regardless of their status at court, to form themselves into a *chambre syndicale* (a form of corporation) with the power to license medical practice in the city. This was a genuine rival college which five years later acquired a proper legal personality. By dint of royal letters patent granted in April 1673 the Chambre syndicale became the Chambre royale with the right to hold processions, meet for religious services, organize public disputes, and examine and receive aspirant members. The Chambre was a powerful competitor, containing some fifty members at a time when the Paris college had no more than a hundred.[208] Even if the letters patent were annulled in June 1673 (thanks possibly to the intervention of Colbert), the *de facto* corps continued to flourish.[209] For the next twenty

[205] *Curieuses Recherches sur les escholes en médecine de Paris et de Montpellier* (Paris, 1651), esp. 228–42. See above, Ch. 2, Sect. C, for Galenic views about the significance of geography and race. Riolan was answered by Simeon Courtaud in the purportedly anonymous *Seconde Apologie de l'université en médecine de Montpellier, répondant aux Curieuses Recherches* (Paris, 1653), which closed the series of polemics.

[206] Inevitably, the Faculty had attempted to prevent this, despite the fact that the sons had studied on the faculty benches for the time prescribed by the statutes: see Solomon, *Public Welfare, Science and Propaganda*, 219.

[207] According to the Faculty Saint-Martin was an ex-monk and totally different from Renaudot who at least was learned: see *Réponse pour la faculté de médecine de Paris à l'écrit qui porte pour titre, Requeste importante pour les médecins de la Chambre royale* (n.p., n.d. [1694]), 18; this brochure can be found in the collection entitled *Déclaration du roy registrée en Parlement, portant suppression de la Chambre royale des médecins des universitez provinciales à Paris* (Paris, 1695).

[208] Cf. the figures in Table 3*c*. As a result the number of learned physicians per 10,000 of the Parisian population was higher than the table suggests. Rival accounts of the history of the Chambre are given in *Réponse pour la faculté*, 4–12; and *Requeste importante pour les membres de la Chambre royale contre les médecins de la faculté de Paris* (n.p., n.d. [1694]), 5–9: to be found in a collection of documents relating to the Chambre in AD Vaucluse D61 (unnumbered series). In 1668 would-be members of the Chambre merely had to show their graduate diploma but from 1672 they had to sustain a dissertation.

[209] See Jacques-Albert Hazon, *Éloge historique de la faculté de médecine [de Paris], 16 octobre 1770* (Paris, 1773), 32–3; the letters patent can be found in AD Vaucluse, D61, unnumbered

years it was protected by the king's premier physician Antoine D'Aquin, who himself had taken his degree at Montpellier in 1648.[210] The Paris Faculty had had enough influence at court to stymie the machinations of the king's premier barber, when he had attempted to remove their supervision of the city's barber-surgeons in the mid-seventeenth century.[211] The king's premier physician, however, was a more difficult nut to crack.

All the same, in the end even the problem of the Chambre royale was resolved to the Faculty's satisfaction. When D'Aquin was dismissed in 1693 he was replaced by Gui-Crescent Fagon (1638–1718), a Paris graduate. The Faculty wasted no time in using Fagon to press its case against the graduate interlopers. In a royal declaration of May 1694 the monopoly rights of the Faculty were upheld and the Chambre abolished. Existing members of the Chambre royale were only to practise thereafter if they became doctors of the Paris Faculty by sustaining the stipulated examinations over the two-year period which led from the baccalaureate to the doctorate.[212] Evidently, it was a significant defeat for the interlopers, who tried to frustrate the crown's decision by appealing to the king's council. The Chambre emphasized its public utility: it gave free treatment to the poor;[213] it held weekly discussions about the value of specific remedies; above all, its members were more successful practitioners than the physicians of the Paris college, as they were ready to use new drugs and did not bleed to excess. Their success, it was claimed, had been proven during the recent epidemic of malignant fever when members of the Chambre performed a sterling service.[214] However, the appeal was to no avail. The Faculty fought back, defending its therapeutic reputation by claiming that its physicians 'have experimented at the Hôtel-Dieu and elsewhere with all sorts of remedies, [also] by bleeding and not bleeding, in order to try to discover the means of saving the sick attacked by malignant fevers, and many [of these remedies] have proved suc-

series; this collection also contains a printed list of the names of 49 physicians who belonged to the Chambre royale in 1669: the large majority were *médecins du roi*, but some were doctors of leading nobles.

[210] Not all *médecins étrangers* belonged to the Chambre royale. Some were excluded, like the apothecary-turned-physician Nicolas (de) Blégny (*c.*1646–1722) of Caen, rejected in 1686 because he refused to submit to the entrance procedures (*Requeste importante pour les membres de la Chambre royale*, 9). Others, like Jean-Baptiste Duchesne (1616–1707), who already had the right to practise in the capital as *médecins du roi*, did not apply (*Réponse pour la faculté*, 35).

[211] For this episode, see above, Ch. 3, Sect. E.

[212] Document published in M. Félibien, *Histoire de la ville de Paris* (5 vols.; Paris, 1725), iv. 313–14. Fagon's role is revealed *inter alia* in the subsequent *arrêt* of the Conseil d'état.

[213] By the end of the 17th cent., this was clearly an essential service if any medical institution wished to curry sympathy with the judges: for other exx., see above, Sect. A.

[214] *Requeste importante pour les membres de la Chambre royale*, esp. 13–18. Once again the *médecins étrangers* tried to use the ploy that the Faculty was full of therapeutic dinosaurs; by this date the accusation was totally untrue.

cessful'.[215] At the same time, it used the traditional ploy of associating many of the Chambre with ignorant empirics, accusing one René de Ratrou of being by origin a *frère missionaire*, presumably a Lazarist priest, who had administered enemas at the Invalides. These physicians, it was argued, would not obey the declaration and avail themselves of the opportunity of becoming Paris graduates legally because they were unlearned.[216] The king clearly agreed, for the council issued an edict upholding the declaration in June 1694 and a fresh declaration was issued in March 1696 clarifying and sustaining the earlier pronouncement.[217] In the era of 'Fagonization' the college was in the ascendant. Even after the first declaration a number of members of the Chambre, notably the botanist and Aix graduate Joseph Pitton de Tournefort (*c.*1655–1708), had applied to begin the process of becoming doctors of the Paris Faculty.[218]

Ultimately, therefore, the development of a powerful resident coterie of court physicians in the seventeenth century, graduates of other faculties, had not spelt the death-knell of the Paris Faculty's legal monopoly. Indeed, the practice of medicine was never really thrown open at all, for the foreign physicians had succeeded temporarily in establishing a rival corporation, not a free market. But the Faculty had been forced to sweat hard for its rights. The battle had gone on for sixty years. The struggle with the foreign graduates was a real war, not a series of minor skirmishes, like its occasional quarrels with the apothecaries or even its more serious clashes with the companies of surgeons. What counted in the end, moreover, was not the position in law—for the Faculty's statutory rights were clear—but the influence the institution could wield at court. There could be no better illustration that corporative rights were made and unmade by the crown in seventeenth-century France and that those close to the king, not the king himself, were the real shapers of government policies.

The creation of the Chambre royale, moreover, was a dangerous precedent. Much more than the crown's temporary support for the pretensions of the surgeons of Saint-Côme or the granting of individual licences, it emphasized the crown's right and intention of organizing and policing the medical realm in the name of the public good, irrespective of traditional corporative privileges. Its patronage of the Chambre royale can be seen as part of the broader attempt in the reign of Louis XIV to place the state at the centre of policing knowledge, which in turn reflected a Europe-wide tendency for the court to provide protection and succour for innovative minds, threatened by entrenched corporative

[215] *Réponse pour la faculté*, 44–5.

[216] Ibid. 24–5. Another was said to be a shoemaker by profession. The pamphlet answers each point in the appeal of the Chambre step by step.

[217] Documents cited in Félibien, *Histoire de Paris*, iv. 316–17 and 348–9.

[218] *Réponse pour la faculté*, 22.

institutions.[219] In fighting the Chambre royale, the Faculty was challenging the crown's right to transfer the locus of knowledge-legitimization from the university to the court. Although in Louis's reign the Faculty successfully defended its position in the end, the problem of court interference in the organization of medicine did not go away. The successor to the Chambre royale would be the Royal Society of Medicine, established a hundred years later.[220]

F. Rereading Molière

The first four chapters of this book have been devoted to describing the medical system of sixteenth- and seventeenth-century France. We have examined the circumscribed role that contemporary culture accorded to secular medicine, the ideology on which medical practice was founded, and the complex field of medical practitioners in which the boundaries between the fast-evolving corporative medical community and the great penumbra of unlicensed and untrained healers were far from clear-cut. The purpose of this present chapter has been to explore how the system worked. It would seem from what has been said above that the system functioned reasonably well.

On the one hand, the obvious limitations of secular medicine in the period and the pain and discomfort of an interventionist therapeutics did not bring the art of healing into disrepute, for the sick were perennial optimists. They recognized that in the final analysis the restoration of health was a divine gift, but they accepted too that disease was normally a natural phenomenon (however caused) and that God had given man the natural means of curbing its ravages. A recourse to secular medicine therefore made sense. In an age that believed in and looked for miracles, the sick always hoped that the medical practitioner, through God's grace, would perform a 'natural' miracle and cure their ills. Just as a belief in God's providence was not undermined by his continual failure to answer the appeal of prayer, so a belief in the efficacy of medicine was not scotched by medical practitioners' repeated lack of success. In both cases, confidence was generally ensured by a deeper belief in the unfathomability of God's designs.[221]

[219] The role of the 17th-cent. court in protecting the freedom of innovative interlopers against entrenched corporate institutions, such as universities, has been recently emphasized in M. Biagioli, *Galileo: Courtier* (Chicago, 1993). Part of the reason for the Faculty's victory may have been the inability of the 'foreign' graduates to convince leading government figures that faculty medicine was antediluvian and that the interlopers represented medical modernity. Interestingly, as was noted above, it was Colbert, the great champion of the court-based organization of knowledge, who prevented their legal incorporation by stopping the letters patent of the Chambre royale being registered.

[220] For this institution, see below, esp. Ch. 12, Sects. D and E.

[221] This viewpoint was popularized in the physicians' vernacular manuals and emphasized by medical students in their publicly sustained dissertations. See above, Ch. 2, Sect. C.

On the other hand, although there were tensions between the corporative medical community and un- or semi-licensed interlopers, which led to destructive in-fighting, these were limited in their impact. Incorporated and unlicensed healers generally served a different circle of clients; the untrained practitioner by and large mimicked the medical rituals of his trained colleague; therapeutic strategies and many specifics were probably widely shared within the wider medical community; and the economic benefits of medical practice, if never great, seem to have favoured the properly qualified. Arguably, in the seventeenth century the real point of friction within the medical system was to be found at the heart of the corporative medical community. After 1600, especially in Paris, harmony was undermined, as a sedentary and expanding court offered novel and unseemly opportunities of enrichment to ambitious learned physicians and gave non-Paris graduates a chance to practise in the capital.

The picture of Ancien Régime medicine and medical practitioners which has emerged in the course of this and earlier chapters is largely positive. Trained, and probably most semi-trained, practitioners took their profession very seriously; they were in their own and their patients' eyes divine agents, deploying a divinely ordained skill.[222] For the most part neither greedy nor lazy, they conscientiously sought to restore health to their patients using the knowledge acquired through their training and subsequent experience. Among graduate physicians at least there was a close fit between ideology and medical practice: in the eyes of learned practitioners medicine was not a hit-and-miss empirical art but a true science, dependent on a knowledge of causes.

This positive picture will surprise readers acquainted with the image of Ancien Régime medical practitioners depicted in the classic literary texts of the era. French poets and dramatists in the sixteenth and seventeenth centuries often painted an extremely unflattering portrait of the learned physician and his subordinates.[223] This was particularly true of Molière, who devoted three complete plays to maligning medical practitioners: *L'Amour médecin* (1665), *Le Médecin malgré lui* (1666), and, the best known, *Le Malade imaginaire* (1673).[224] Molière's satire at the expense of the corporative medical community was vicious. The most visible fault of its members, the playwright intimated, was their unscrupulous pursuit of wealth, a fault emphasized in the famous opening

[222] The Anjou female empiric Jean L'Escalier insisted that she was doing God's work, it will be recalled: see above, Ch. 4, Sect. F.

[223] I. Philström, *Le Médecin et la médecine dans le théâtre comique français du dix-septième siècle* (Uppsala, 1991).

[224] Molière's early *Le Médecin volant* (*c.*1658) has a more sympathetic tone. Members of the corporative medical community also appear in *Dom Juan* (1665) and *Monsieur de Pourceaugnac* (1669). The most recent account in English of Molière and the doctors is A. Calder, *Molière: The Theory and Practice of Comedy* (London, 1993), ch. 12.

to *Le Malade imaginaire*, where the hypochondriac Argan peruses the bill presented by his apothecary: 'What pleases me about Monsieur Fleurant, my apothecary, is that his accounts are always so polite ... but, Monsieur Fleurant, it is not enough to be civil, one must be reasonable and not flay the sick' (I. i).[225] But Molière's portrait contained a number of other negative characteristics. Physicians were accused of failing to spot hypochondria (in the modern sense of the term), treating their patients brutally, behaving like graceless windbags[226] embracing an out-of-date ideology, being querulous, and being incapable of reaching agreement on a diagnosis. Above all, despite their jargon and ideological obfuscation, they were guilty of always resorting to the same therapeutic ritual of prescribing clysters, then bleeding, and finally purging their patients, if individual practitioners might favour one element in the triad more than the others: the preference of Monsieur Purgon in *Le Malade imaginaire* was meant to be plain to all.[227] At the end of *Le Malade imaginaire*, as the hypochondriacal Argan receives his medical degree in a mock ceremony, the attendant bachelors chant in unison the refrain 'Clysterium donare, | Postea seignare, | Ensuitta purgare', as if it were a mindless mantra.

The reality of Molière's portrait lies in his understanding of the close relationship between physicians and apothecaries.[228] Interestingly, no surgeons appear in his plays. In most respects, however, this is a portrait which bears no relation to the picture of the medical profession painted in this and earlier chapters. Indeed, it is grossly unfair. When Molière lampooned the Paris physicians in 1673 for adhering 'blindly to the opinions of our ancestors' and refusing 'to listen to the arguments and experiments in favour of the alleged discoveries of our century, concerning the circulation of the blood, and other ideas of that kidney', he completely distorted the truth.[229] The accusation might have made sense in the 1640s and 1650s, but even then faculty physicians, such as Riolan, were engaging with the new anatomical discoveries, however critically. By the 1670s it made no sense at all: every faculty of note had seen students sustain Harveian physiology in the preceding decade.[230]

The graphic power of Molière's art, however, is so great and his satire has

[225] This and later trans. are from the French text printed in *Œuvres de Molière* (Oxford, 1900 edn.). Later in the play we are told that the physician Purgon was worth 10,000 *livres* p.a. (I. v).

[226] Ibid. II. v, where the junior physician Thomas Diafoirus pays laborious court to Cléante.

[227] The physicians in *Monsieur de Pourceaugnac* prefer bleeding.

[228] See above, Ch. 3, Sects. E and F.

[229] *Le Malade imaginaire*, II. v. The physician Diafoirus senior is speaking in praise of the conservative stance of his son Thomas.

[230] The last Paris thesis to attack Harvey's theory was sustained in 1672: see above, Ch. 2, Sect. E. Molière's unjustified attack on the obscurantism of faculty medicine was echoed in a lampoon penned by the poet Boileau two years later which lambasted university learning *tout court*: see 'Arrest burlesque', in Boileau, *Œuvres*, 325–30.

been so influential in shaping the perceptions of posterity that his portrait cannot be ignored. Indeed, thanks in large part to Molière, medical historians of nineteenth-century France still assume that the faculties remained wedded to Galen, even on the eve of the Revolution: an absolute travesty of the truth as we will see in a later chapter.[231] It would not be an exaggeration to say that Molière has been treated by historians as an unimpeachable authority. In bringing this first part of the book to conclusion, therefore, a few remarks are obviously required to help explain his negative attitude and throw light on his satire.

In the first place, the plays must be put in their literary context. There can be no doubt that learned physicians prior to the mid-seventeenth century had always had a bad image in European literature. From the time of Tacitus and Suetonius they had been commonly portrayed as greedy and godless associates of murderers. Chaucer's 'doctour of physik', whose 'studie was but litel on the Bible' and who 'lovede gold in special' was a recognizable literary type.[232] Nevertheless, Molière's attack on the profession was particularly severe, because it was so sustained and took place on the stage. In the drama of the sixteenth and seventeenth centuries physicians, if they appeared at all, had walk-on parts. Obviously, medical practitioners were unlikely to have large parts in tragedies, given the dramatic conventions of the age which stipulated that the tragic dealt with the heroic and the aristocratic. But they seldom appeared even in comedies. Shakespeare's plays scarcely portrayed any physicians.[233] Moreover, Molière's satire was aimed at particular individuals, not just the profession as a whole. In *L'Amour médecin* he poked fun at a number of court physicians, especially the notorious antimony pedlar François Guénault. On the play's first performance there could be no doubt that Guénault was guyed in the guise of Dr Macroton. In case the audience failed to draw the necessary conclusion from the character's slow drawl and ponderous periods, the actor was unambiguously equipped with a look-alike mask.[234]

Molière's view of the medical profession, therefore, was certainly not just a literary convention. He genuinely believed that recourse to graduate physicians

[231] e.g. J. Léonard, *Les Médecins de l'Ouest au XIXe siècle* (3 vols.; Lille, 1978), i. 132–5. For faculty medical ideology in the 18th cent., see below, Ch. 7, esp. Sects. A and B.

[232] *The Canterbury Tales*, Gen. Prologue, ll. 438 and 444.

[233] There are about a half-dozen doctors in Shakespeare's plays. Intriguingly, the only one of the group to have a rounded character is Cornelius in *Cymbeline* who is on the side of the angels. First agreeing to oblige his murderous patroness, he then substitutes an anodyne sleeping draft for the poison she seeks (I. v).

[234] Henri, duc d'Aumale, *Histoire des Princes du Condé pendant les XVIe et XVIIe siècles* (8 vols.; Paris, 1883–96), viii. 198 n. 1: letter of the comte de Langeron to Pierre Desnoyers, 18 Sept. 1665. See also Patin, *Lettres*, iii. 556: letter of Patin to Falconet, 25 Sept. 1665. Guénault, who was doctor to Molière's patron, seems to have taken the lampoon in good part. Guénault's penchant for charging round Paris on horseback was guyed in the same play in the character of Des Fonandrès.

was useless, their ideology suspect, and their status pretensions morally outrageous. But equally he was no supporter of alternative medicine, a believer in the potential of empirical doctors. Molière distrusted healers of all kinds and seems to have believed that nature should be left to heal itself. His position was outlined succinctly in Act III, Scene iii of *Le Malade imaginaire*, in the course of a dialogue on the utility of physicians between the hypochondriac Argan, and his brother Béralde, who spoke for the playwright.

ARGAN: Why won't you accept, brother, that one man can cure another?
BÉRALDE: Because, brother, until now the springs of our machine are mysteries, about which we know not one iota, for nature has placed veils in front of our eyes, which are too thick to allow us to know anything.

....

ARGAN ... What should we do then when we are ill?
BÉRALDE: Nothing, brother.
ARGAN: Nothing?
BÉRALDE: Nothing. We need only rest. Our nature, by herself, when we let her act, pulls us out of the disorder into which she has fallen. It's our worrying, our impatience which spoil everything, and almost all men die from their remedies, and not from their diseases.[235]

Molière's medical agnosticism can only be understood in the light of the dramatist's wider philosophical interests and beliefs. Molière was a genuine sceptic. He belonged to a small but significant coterie of sixteenth- and seventeenth-century writers and philosophers in France who believed that man's ability to understand himself and his environment was very limited. All dogmatic philosophical systems were suspect and only experiential knowledge, albeit to a limited degree, was valid.[236] The most influential member of the coterie in France was its founding-father Montaigne, and, not surprisingly, the author of the *Essais* was equally hostile to the claims of the medical profession. Although Montaigne did not deny the possibility of finding a cure for disease—indeed, he continually sought a lithontriptic that would relieve his own pressing nephritic ailment—he both feared and despised physicians. It was his belief that those treated by doctors were sick first and cured last, and he advised the ailing who contemplated seeking the help of a medical practitioner to 'order a purgation for your brain; it will be better employed there than in your stomach'.[237]

[235] Cf. also *Dom Juan*, III. i. Dom Juan's servant Sganarelle disguises himself as a physician and practises on unsuspecting peasants. Dom Juan applauds the imposture on the grounds that neither the empiric nor the learned physician can cure disease, so Sganarelle is as good or bad as the faculty doctor he is pretending to be.

[236] R. McBride, *The Sceptical Vision of Molière* (London, 1977). The standard study of 16th- and 17th-cent. scepticism remains R. H. Popkin, *The History of Scepticism from Erasmus to Spinoza* (rev. edn., London, 1979).

[237] *Essais*, ed. A. Micha (3 vols.; Paris, 1969), ii. 430. Montaigne discusses medicine in bk. ii,

The fact that Molière should have felt compelled to attack the claims of the medical dogmatists so fiercely was probably due to the peculiar cultural environment in which he lived and worked. Earlier French sceptics had inhabited a largely monolithic philosophical world where, within the élite and probably throughout the population as a whole, the fundamentals of Aristotelo-Galenism were the common medical currency of the learned and unlearned alike. Primitive Galenism, it has been argued, was part of the common cultural inheritance, passed down by word of mouth, popularized in print, and divulged at the bedside.[238] The ordinary faculty physician, therefore, could not be blamed for blindly embracing the assumptions of everyman.[239] The detached viewpoint of the stoic and sceptic could scarcely be demanded of the common soul. In the second half of the seventeenth century, however, there was good reason why Molière should have felt less charitable, for in the form of Cartesian or Gassendist mechanism, there was now a completely alternative philosophy to Thomist Aristotelianism, one from which immaterial faculties, qualities, and spirits had been totally banished.[240] Widely disseminated among the *érudits* of the capital in the 1650s and 1660s, the new philosophy nevertheless had little impact on the French faculties during Molière's lifetime. When Molière died in 1673, the faculties were certainly coming under the influence of iatrochemical ideas, just as they had previously absorbed certain aspects of Paracelsianism, but the mechanical philosophy, as we have seen, was all but ignored.[241] To a sceptic like Molière, influenced by mechanist ideas, if unconvinced of their utility in the medical realm, the dogmatic beliefs of the learned physicians must have seemed all the more preposterous. The faculty physicians' claim to respect derived from

ch. 37 and bk. iii, ch. 13. As we saw above, Sect. C, Montaigne visited a number of foreign spas in search of a cure for the stone.

[238] We will never know how far popular medical discourse was exclusively Galenic in the 16th and 17th cents., but there can be no doubt that the fundamentals of Aristotelo-Galenism could be easily absorbed by the laity: cf. above, esp. Ch. 4, Sect. F, on the popularization of faculty Galenism. It should be noted, in addition, that many male members of the élite learnt the fundamentals of Galenism during their philosophy studies at the *collèges de plein exercice*, for the elements of physiology were often taught in the part of the physics course devoted to the study of the Aristotelian doctrine of the soul: e.g. Pierre Gautruche (SJ), *Philosophiae ac mathematicae totius ... institutio ... ad usum studiosae iuventutis* (6 vols., Caen, 1665), iii. *Physica particularis*.

[239] The 16th cent. did see, of course, the development of an alternative medical philosophy in the form of Paracelsianism, but it will be recalled that the chemists' philosophy for religious reasons had a limited following in France, especially among faculty professors: see above, Ch. 2, Sect. D.

[240] In many respects the Neoplatonic and hermetic philosophies revived in the Renaissance, from which Paracelsianism derived, shared many common features with the dominant scholastic Aristotelian tradition. This is not to say that the mechanical philosophers were as original as they claimed to be, for Descartes in particular owed much to Thomas Aquinas: see esp. E. Gilson, *Étude sur le rôle de la pensée médiévale dans la formation du système cartésien* (Paris, 1930).

[241] See above, Ch. 2, Sect. F.

their learning, but their learning was clearly discredited. It was not just that the physicians were incompetent (after all the physicians themselves accepted the practical limitations of their art), but that they clung to a learning that had been unmasked as sophistry. Molière attacked the corporative community from his position as a sceptical mechanist.[242]

But if Molière's sceptical mechanism explains his hostility towards the medical community, it does not account for the particular negative traits that his satirical portrait highlighted. These can only be understood in terms of his dramatic intentions and his audience. Molière's aim, especially in *Le Malade imaginaire*, was to convince the court that consulting a physician, any physician, was a waste of time and positively dangerous.[243] But this required cunning, for he was unlikely to win many converts to his position simply by outlining his own medical convictions based on his sceptical mechanism. Molière's medical message, it must be stressed, would have seemed extremely peculiar in the reign of Louis XIV. His hostility to the principle of medication *tout court* was unrepresentative of an age which believed that the art of healing was divinely constituted and its remedies essential to conquer disease.[244] Moreover, there would have been few converts at court in the early 1670s to the mechanical philosophy. In the third quarter of the century the majority would still have been the unreflecting adherents of Thomist Aristotelianism, the philosophy upon which they, like Molière himself (who had supposedly attended the Jesuits' Paris college), would have been reared.[245] Molière, then, had to find an indirect way of winning the assent of his audience for his philosophy, baldly stated in Act III, Scene iii. He tried to do this by presenting a portrait of the medical profession in the rest of the play which could be guaranteed to work on the aristocratic sensibilities of his

[242] Molière has usually been associated with Gassendism. Pierre Gassendi (1592–1655) developed an anti-dogmatic, probabilist mechanical philosophy very different from Descartes's, based on his nominalist epistemology: see esp. O. Bloch, *La Philosophie de Gassendi* (The Hague, 1971).

[243] Molière was as sceptical of new remedies as he was of traditional ones. In *Dom Juan* (III. i) antimony wine was singled out for censure; hence his readiness to satirize Guénault, the antimony doctor, in *L'Amour médecin*.

[244] Molière satirized the contemporary belief that learned practitioners were doing God's work by depicting his physicians as, sacrilegiously, claiming for themselves divine powers; Argan is threatened with dire diseases if he does not obey his physician: *Le Malade imaginaire*, III. v.

[245] It was only *c.*1670 that the mechanical philosophy began to be taught sympathetically by a handful of *avant-garde* professors. Even then their initiative was squashed by the joint endeavours of Church and Crown, and the reception of the new philosophy in the classroom delayed for a further twenty years. For the attack on mechanist professors in these years, see esp. 'Quaedam recentiorum philosophorum ac praesertim Cartesii propositiones damnatae ac prohibitae', in Jean Du Hamel, *Philosophia universalis, sive commentarius in universam Aristotelis philosophiam ad usum scholarum comparata* (5 vols.; Paris, 1705), v, app., pp. 1–45. For a broad account of the spread of the mechanical philosophy in the reign of Louis XIV, see L. W. B. Brockliss, 'The Scientific Revolution in France', in R. S. Porter and M. Teich (eds.), *The Scientific Revolution in National Context* (Cambridge, 1992), 68–79.

audience. Today, we smugly laugh at the Galenic nonsense prattled by the medical men in the play, but in fact Molière placed very little emphasis on their philosophical ignorance, and what seems absurd to a modern audience may not have seemed so then.[246] Rather, he concentrated on portraying the physicians' practical and social ineptitude: their inability to know a healthy man when they saw one, and their boorishness. They were deliberately presented as incompetent *vils bourgeois*, the sort of people with whom no self-respecting aristocrat would wish to consort. The physicians might have had a classical training but they had become pedants, bullies, and cheats, not cultivated men of the world, and as such had no common cultural ground with their courtier patients.[247]

Moreover, to hammer home the point that it was dishonourable for a courtier to consort with physicians, Molière was careful to depict their patients as equally unsympathetic. Fleurant and Purgon's client was not a poor unfortunate struck low by a mortal ailment but a mean, suspicious, and easily gulled hypochondriac. Molière's satire extends to the patient as much as the doctor. The characterization of Argan, indeed the very title of *Le Malade imaginaire*, was meant to suggest that doctors only existed through the demands of their patients. Yet Molière's patients were skilfully socially constructed, so that a continual reliance on the physician became a bourgeois trait: Argan was a bourgeois not an aristocrat. The audience was supposed to conclude that no sensible aristocrat or courtier would be so much a slave to his body or so easily taken in. Clear-sighted, upright souls, even servant-girls, like Toinette, would see through the incompetence of medical practitioners without difficulty.

Whether Molière's portrait was just is irrelevant. It was a dramatic device which, it was hoped, would lead the audience to reflect on the social wisdom of its relations with the corporative medical community, even if the intellectual message were not immediately assimilable. The dramatic purpose of comedy in the sixteenth and seventeenth centuries was to change people's behaviour, not just to make an audience laugh. And there could be no renovation of manners unless the aristocrats took the lead. Of course, Molière's dramatic artifice was not successful. Although the playwright's depiction of the corporative medical community quickly became part of contemporary court discourse, crown and courtiers in the final quarter of the seventeenth century were just as dependent on medical practitioners as they had ever been. Madame de Sévigné is an obvious case in point: she adopted Molière's critical rhetoric but failed to internalize

[246] It is left to the servant Toinette, in *Le Malade imaginaire*, to state bluntly that doctors kill their patients.

[247] In other words, the physicians and apothecaries presented in Molière's plays were not *honnêtes hommes*. *Honnêteté*, meaning integrity, urbanity, and social adeptness, was a key aristocratic value of the 17th cent.: see esp. M. Magendie, *La Politesse mondaine et les théories de l'honnêteté en France au XVIIe siècle, de 1600 à 1660* (2 vols.; Paris, 1925).

his medical message.[248] When Molière dropped dead on stage during the third performance of *Le Malade imaginaire*, virtually the whole of élite society, not just the corporative medical community, must have thought his demise poetic justice, or rather a divine chastisement. A man who had apparently devoted his theatrical life to spreading atheism, immorality, and scepticism had finally been invited to dine by the divine *commendatore*.

Molière's picture, then, of a medical system in crisis, one where venal practitioners turned their back on empirical reality and justified the use of lethal remedies on gullible patients by recourse to a bogus science, was a reflection of his unrepresentative and suspect (in contemporary eyes) philosophical prejudices. In fact, as Part I of this book has set out to show, the medical system of sixteenth- and seventeenth-century France functioned relatively smoothly. As will be shown in Part II, the crisis did indeed eventually come, as the assumptions and demands of the sick changed, medical science was revitalized, and the state began to take a much more assertive interest in secular medicine and its possibilities. But the crisis would not really begin to bite until fifty years after Molière's death, if, admittedly, the cracks in the edifice began to show from the moment that the faculties came under the influence of iatromechanism in the 1690s.[249] Paradoxically, the event which demonstrated that the traditional medical system was in the process of erosion was the plague epidemic which hit Marseilles and Provence in 1720. As we will see in Chapter 6, in important respects this was the corporative community's finest hour, but the forceful and positive way in which the epidemic was eventually dealt with revealed with hindsight that the context in which the traditional medical system operated was changing and that the system itself was also in the process of what was to become a highly unstable pattern of evolution.

[248] For Molière's effect on court discourse, see the essays in *Madame de Sévigné, Molière et les médecins de son temps* (Actes du Centre méridional de Rencontres sur le XVIIe siècle; Marseilles, 1973).

[249] For this, see below, Ch. 7, Sect. B.

PART II

BEYOND THE SHADOW OF THE PLAGUE

6

Death and Disease in the Eighteenth Century (*c.*1680–1789)

A. Marseilles in 1720: 'Days of Affliction and Mourning'[1]

In 1720 Marseilles, the third city of France, the country's largest and wealthiest port, was afflicted by an outbreak of bubonic plague.[2] The disease wreaked its havoc upon the inhabitants of the city and the surrounding region as if following

ILLUSTRATION 10. The Marseilles plague epidemic, 1720. The last great plague outbreak in the history of western Europe excited alarm throughout the continent. This English version of J. F. Troyes' engraving depicts the city's governor at the centre of the action. Disease was contained by heroic and masterful administrative measures, not by better cures.

[1] Citation from P. H. Roux, a Marseilles businessman, cited in C. Carrière *et al.*, *Marseille, ville morte* (Marseilles, 1968), 53.

[2] Ibid., for the best recent account of the 1720 Marseilles plague epidemic. See too J. N. Biraben, *Les Hommes et la peste en France et dans les pays européens et méditerranéens* (2 vols.; Paris,

the stages of an ancient ritual: it came from outside, struck suddenly, proceeded wildly and unpredictably, and effected massive trauma on the body social. The disease, whose last visitation on the city in 1649 only sturdy octogenarians would have recalled, arrived in late May on board the *Grand Saint-Antoine*, in provenance from the Levant where an epidemic had been raging for some time. It appears to have penetrated the city in early June, with bales of cotton merchandise released illicitly and in contravention to quarantine regulations. The first plague death occurred on 20 June, and though on 15 July the city fathers wrote to other port authorities in the Mediterranean firmly denying the presence of plague within the port, and tended to believe those medical practitioners they consulted who ascribed deaths to sickness linked with poverty and want rather than epidemic disease, it was soon abundantly clear that an untoward illness was abroad, causing fright and panic among the city's inhabitants and provoking a sudden wave of mass emigration, perhaps 10,000 of the population of 90,000 fleeing for their lives.

Arriving unforeseen and unpredictably, the plague followed a hectic course, along lines which seemingly beggared rationality. There had been no outriders for the appearance of the disease. No minor epidemics had occurred as was often thought likely when plague struck, and shortage of food had not spread malnourishment or malnutrition to soften the city up for the ravenous disease. A 'popular disease' (*maladie populaire*), as the accepted jargon had it, the plague affected the wealthy as well as the disinherited, and seemed at times to show a perverse predilection for the wide open spaces of wealthy neighbourhoods rather than the filthy, crowded alleys of the popular quarters. Effecting its habitual ravages on the bodies of its victims, who ended up stinking, decomposing, putrescent, delirium-racked sites of trauma, it seemed to threaten the viability and integrity of the collective body social. Trade, the lifeblood of this eminently commercial city, ground to a standstill: work ceased, the port closed, bread and essentials were distributed in doles rather than through business transaction. The religious as well as the commercial cadres of everyday life were also removed: public ceremonies of any sort were soon prohibited. The habitual division between the private and the public, intimacy and sociability, broke down, as people fled their homes when the disease appeared, leaving family members to die horribly on their own, and seeking refuge in the diseased ranks

1975–6), i. 230 ff.; id., 'Certain Demographic Characteristics of the Plague Epidemic in France, 1720–2', *Daedalus* (1968), 536–45; and M. Lucenet, *Les Grandes Pestes en France* (Paris, 1985), 217 ff. Of 18th-cent. accounts, see esp. Jean-Baptiste Bertrand, *A Historical Relation of the Plague at Marseilles in the Year 1720* (Farnborough, 1973 edn.) and [Jean Sénac and Michel Chicoyneau], *Traité des causes, des accidents et de la cure de la peste, avec un recueil d'observations* (Paris, 1744). We have also drawn heavily on other plague writings of the early 18th century, discussed in C. Jones, 'Plague and its Metaphors in Early Modern France', *Representations*, 53 (1996), 97–127. For plague in general, see too the works cited in Ch. 1, esp. n. 2.

of the anonymous hordes roaming the desolate squares and public places. Family ties were dissolved: parents abandoned diseased children, children left their diseased parents to suffer by themselves. Gender solidarity counted for nothing: mothers gave birth alone rather than with the encouraging ranks of mothers and matrons. Houses were now deserted, and taken over by owls and bats. Pyramids of corpses were soon lying stinking, decomposing, and untended in the streets, where they became a favourite target of gnawing dogs and hungry vermin. Efforts to remove them increased an overwhelming sense of ignominy: bands of roving helpers, many drawn from the ranks of galley-slaves and convicts from Toulon, rounded them up and dumped them unceremoniously in common grave-pits lined with quicklime. The service scandalized, as the helpers allegedly robbed corpses of valuables, engaged in leapfrog over stacked corpses, and covered bodies over so badly in the death-pits that limbs were left poking up imploringly above ground level.[3]

As the community of Marseilles lived through the secular, habitual, almost scripted paroxysms of a plague epidemic, it was only to be expected that the traditional explanatory frameworks provided by religion should be endlessly invoked. The image of the plague-wracked body instanced the visitation as an expression of God's ire. A contemporary twist to this hallowed explanation was given by some who said it was an arrow aimed from on high against the city's Jansenists, but more widely it was seen as punishment for the city's links with perdition and sin.[4] Commerce, the city's especial vocation, came close to outright condemnation as a maleficent force. The clergy organized the community's redemptive strategy with its customary *élan*. Parish priests were besieged by their parishioners wishing to confess their sins. Churches were filled—until the disease reached the stage when all public assemblies were banned—and vows were made, with St Roch, the Virgin Mary, and the other security figures among the heavenly host being endlessly invoked. The city's bishop, the haughtily zealous Monseigneur de Belsunce, almost a cardboard cut-out of the ideal, heroically committed post-Tridentine bishop, stayed in the midst of his flock and offered them consolation. He was to be seen touring the city, cassock sleeves rolled up high, a sponge of aromatic under his nose to keep the stench at bay, offering alms, comfort, and confession to the sick and dying, an ambulatory oasis of redemptive sanctity, seemingly invulnerable (eleven out of the twelve of his entourage died of the plague) amidst an epidemic which caused the death of perhaps 50,000 of the 90,000 who had inhabited the city on the eve of the plague. It was Belsunce who took on the role of community leader as, slowly, the city pulled out of its crisis, formally fulminating against the disease and leading

[3] See esp. Lucenet, *Grandes Pestes*, 263.
[4] Carrière *et al.*, *Marseille, ville morte*, 201.

the purificatory prayers and reconsecratory processions round the bounds of the city.[5]

There was much, then, about the Marseilles plague of 1720 which resembled a replaying of ancient, time-honoured ritual, and it is understandable that contemporaries should reach for traditional schemas of explanation and behaviour in coming to terms with it. Yet in fact, despite the structural similarities with the past, there were crucially important differences too which the event signalled and which marked contemporary sensibilities. Despite the appearances of urban disaster, the plague constituted a victory for the wider regional, national, and international community. For the fact of it was that while Marseilles and its neighbouring localities suffered, they suffered alone. Measures of containment allowed the disease to be contained within a circumscribed south-eastern corner of France. Indeed, to a certain degree, Marseilles suffered so that others could be free of the disease: the death rate was so exceptionally high precisely because no escape was allowed.[6] The city and its surrounding province were effectively sealed from the outside world by an unbreachable cordon sanitaire. The celebration of victory over plague was a redemptive act on the part of the afflicted community; but that redemption was organized by administrative confinement and state repression.

The administrative response had been learned gradually, over previous centuries. To a considerable extent, what happened in 1720 was merely the more systematic implementation by regional, national, and international bodies of that package of measures which individual communities had been putting into effect since the very earliest days. There was nothing new, for example, about the idea of quarantine: Ragusa had introduced it in 1377, many other port cities soon after. The idea of councils of health, health certificates, isolation of affected areas, and so on all had venerable ancestries by 1720.[7] The mood of determination had been earlier captured perfectly in the comment of Guillaume L'Erisse, autodidact *capitaine de la santé* from the Dauphiné, who stated that 'If even God ungraced himself so as to be suspect of contagion, it would be my duty to keep him confined.'[8] To a large extent, state policy from the second half of the seven-

[5] For Belsunce, ibid. 65, 100–3, 122, etc.

[6] The arguments adduced on this point by O. J. Benedictow, 'Morbidity in Historical Plague Epidemics', *Population Studies*, 41 (1987), 401–31, esp. 416, seem cogent and convincing.

[7] See above, Ch. 4, Sect. C. For quarantine, besides Biraben, *Hommes et la peste*, ii. 84 ff., see esp. D. Panzac, *Quarantaines et lazarets: L'Europe de la peste d'Orient (XVIIe–XXe siècles)* (Aix-en-Provence, 1986) and F. Hildesheimer, *Le Bureau de santé de Marseille* (Marseilles, 1980). For health councils, the work of C. Cipolla is illuminating: see e.g. his *Miasmas and Disease: Public Health and the Environment in the Pre-Industrial Age* (London, 1992), for an overview. On the policing of the plague city, see too M. Foucault, *Discipline and Punish: The Birth of the Prison*, Engl. trans. (London, 1979), 198 ff.

[8] *Méthode excellente et fort familière pour guérir la peste et se préserver d'icelle* (Vienne, 1628), 52.

teenth century onwards was merely that mood writ large. The central government sought to articulate above the level of the town or village policies learnt by trial and error within individual localities. Regional coordination of plague measures had developed in the seventeenth century: the Parlement of Paris had pronounced on measures from the 1622 plague outbreak onwards: in 1631, for example, it ordered every locality within its jurisdiction to establish a health council (*conseil de santé*).[9] The Parlement of Provence at Aix issued almost an ordinance a day at the zenith of the Marseilles plague in 1720, and its peers in adjacent regions also legislated to activate regional defence against the disease. From the middle of the seventeenth century the pilot role in this coordination process had passed to the intendants, the royal administrative officials established from the 1620s onwards and who by the 1650s and 1660s had largely taken over the role formerly ascribed to the *parlements* and were forming an effective conduit of royal power. Local intendants had demonstrated their utility when, in an operation which was almost a dress rehearsal for 1720, plague invaded northern France in the late 1660s. Well-coordinated regional policy had established a cordon sanitaire around the affected area and this had proved effective in localizing the danger, and preventing it from entering Paris (see Map 6*a*).[10]

MAP 6*a*. The impact of the cordon sanitaire: the geography of plague, 1628–1631, 1668–1669, 1720–1722

Source: adapted from F. Lebrun, *Se Soigner autrefois: Médecins, saints et sorciers aux XVIIe et XVIIIe siècles* (Paris, 1983) 162 f.

[9] Des Essarts, *Dictionnaire universel de police* (6 vols.; Paris, 1776) iii. 238, art. 'peste, contagion', which provides a valuable historical sketch of anti-plague measures in France.

[10] J. Revel, 'Autour d'une peste ancienne: la peste de 1666–1670', *Revue d'histoire moderne et contemporaine*, 17 (1970), 953–83; and A. P. Trout, 'The Municipality of Paris Confronts the Plague of 1668', *Medical History*, 17 (1973); F. Lebrun, 'L'Intervention des autorités face aux crises de mortalité dans la France d'Ancien Régime', in A. E. Imhof (ed.), *Leib und Leben in der Geschichte der Neuzeit* (Berlin, 1983), 46 ff. For the intendants in general, see R. Bonney, *Political Change in France under Richelieu and Mazarin, 1624–1661* (Oxford, 1978).

The importance of the intendants in the coordination of plague defence measures demonstrated the central power's interest in the problem: plague had become a matter of state. The preservation of health appeared a priority of governments increasingly committed to the saving of potentially productive manpower and a broad range of mercantilistic policies.[11] Symptomatically it had been Colbert, the cynosure of mercantilist lore, who had directed the anti-plague campaign in the late 1660s. Royal edicts now endorsed, and at times corrected, local initiatives, as the full weight of royal might was brought to bear on the prosecution of its plague policy. Indeed, the cordon sanitaire established on the Rhône and on the northern and eastern frontiers of Provence in 1720 had involved, besides city bourgeois militias and provincial levies, one quarter of the regular army: about half the total correspondence of the minister of war from 1720 to 1722 had concerned the plague blockade.[12] There was a new rigour in the prosecution of the anti-plague campaign: would-be escapees from the confinement zone had their skulls beaten in by the rifle-butts of frontline soldiers: an early triumph, as Jack McManners has sardonically commented, for the principles of preventive medicine.[13] The crown also was active in regulating the process by which the embargoes on communication with the afflicted city and province were gradually lifted—especially important in that the Marseilles plague flared up in 1721 after looking as though it had burned itself out, while in the same year the disease managed to winkle its way into neighbouring Languedoc. The final bolt was only pulled in 1723.[14]

The central government also now acted far more proactively and constructively in repairing the social and economic damage the plague had caused. From the mid-seventeenth century it had provided funds directly to affected areas, rather than expecting localities to pick up the bill for emergency measures or merely allow tax rebates. By 1722 the state had poured in 1.4 million *livres* of assistance to the affected area. This might have been only a tiny percentage of total state income at the time but it made a very considerable impact in those domains in which the money was spent (notably in the local supply of food and provisions, necessitated by the trade embargoes).[15] The amazing speed of recovery of Marseilles and the region after 1722 bore witness to the happy effect of such policies. The crown's authority was essential too in helping to coordinate measures internationally. An international network of lazarettos was gradually constructed over the late sixteenth and seventeenth centuries to monitor trade movements in time of plague. France was in the forefront of this responsible

[11] See below, Sects. D, E, and F. [12] Panzac, *Quarantaines et lazarets*, 60 f.

[13] *Death and the Enlightenment: Changing Attitudes to Death among Christians and Unbelievers in Eighteenth-Century France* (Oxford, 1981), 46.

[14] Carrière *et al.*, *Marseille, ville morte*, 154; Lucenet, *Grandes Pestes*, 265.

[15] Carrière *et al.*, *Marseille, ville morte*, 334.

approach: it had established a permanent health board (*bureau de santé*) at Marseilles in 1640, built a massive lazaretto there, completed in 1668, and then in the following year passed a decree limiting trade with the Levant to the sole port of Marseilles. The policy of ports keeping each other informed of their state of health had gradually become current over the seventeenth century, with even Russia and the northern states joining in from the late seventeenth century and the north African Barbary states doing the same shortly afterwards. It operated even during periods of armed hostilities between states. The price of freedom from plague seemed to be the international institutionalization of vigilance plus the creation of mountains of paperwork and correspondence.[16]

Despite its paroxysmic ring of familiarity, therefore, the events at Marseilles in 1720 were not the latest episode of an unending cycle of divine punishment, but a final chapter in western Europe's secular struggle against plague. Provence had experienced 43 plague outbreaks between 1451 and 1550, and 29 between 1551 and 1650, but only 4 after 1650.[17] The year 1720 was thus a final blip rather than part of an ongoing process. Other states in western Europe had their last encounter with the disease at roughly the same time: Britain's last epidemics had been in 1665, northern Europe's in 1709–10, Sicily in 1743, and so on.[18] The plague in Marseilles, moreover, was the first in France since 1670. Indeed, its psychological impact owed something to its archaic flavour. The regional, national, and international administrative cooperation which restricted the penetration and diffusion of the disease did not fade away after 1720. Indeed, there were probably stronger controls in place after 1720 than at any other time in the history of the disease. There were sixteen lazarettos built in the Mediterranean in the eighteenth and early nineteenth centuries—two more than the fourteen built between 1575 and 1675 when the disease was at its height in western Europe. The Marseilles institution was modified in major ways in 1730 and 1787. The port still received plague-infested ships, nineteen of them between 1716 and 1795.[19] Plague still fuelled communal anxieties and public interest. The customary plague procession for St Sebastian held at Nantes, started in 1501, continued annually down to 1790.[20] There were more books on plague published in France in the 1720s than in any other decade since the invention of print, and best sellers were still being written decades after it

[16] Panzac, *Quarantaines et lazarets*, and Hildesheimer, *Bureau de santé* are essential sources on these processes. For the urban analogue, cf. Foucault, *Discipline and Punish*, 198: 'the plague-stricken town, traversed throughout with hierarchy, surveillance, observation, writing'.

[17] Panzac, *Quarantaines et lazarets*, 11.

[18] For the European pattern, see Biraben, *Hommes et la peste*, i. 189 ff.; and M. Flinn, 'Plague in Europe and the Mediterranean Countries', *Journal of European Economic History*, 8 (1979), 131–48.

[19] Panzac, *Quarantaines et lazarets*, 34 ff., 53, 85, etc.

[20] Biraben, *Hommes et la peste*, i. 67.

had ended.[21] Nevertheless, there is a sense in which one can say that from 1720, the shadow of plague was being definitively lifted from the demographic, social, cultural, and indeed psychological landscape of early modern France. The most deadly disease threat of the early modern period was being brought under control by the well-oiled machinery of government. As the print explosion around 1720 attested, the fact that plague had been defeated was big news.

Though medical practitioners played an important role in it, the victory over plague was a victory for administration rather than medicine. The *Encyclopédie*'s comment on the disease half a century later that 'no one has yet given the cause nor the remedy for this terrible disease' signalled plague's continuing status as a medical enigma.[22] None of the physicians from the Montpellier Medical Faculty sent into Marseilles by the central government to report on the disease and organize the city's defence against it comprehended plague's aetiology or effective treatment: François Chicoyneau (1672–1752) and apothecary François Verny were firm anti-contagionists, though their colleague Antoine Deidier subsequently came close to accepting a contagionist line supported by some Marseilles physicians such as Jean-Baptiste Bertrand.[23] The therapy they recommended was classic—and classically ineffective: indeed bleedings and purgatives may even have weakened some borderline cases beyond hopes of recovery. They probably achieved more through measures of preventive medicine than through the active care of the sick. The medical men's courage was no greater than the clergy's, who under Belsunce's disciplined example exhibited their habitual bravery. The physicians also failed to hide their customary contempt for their inferiors—the Montpellier professors were disdainful of their Marseilles confrères, and showed great haughtiness towards surgeons and apothecaries.[24] They were also accused of venality: the emissaries from Montpellier were said to have insisted on being fed and boarded like princes. Though they were well rewarded—and certainly more so than the clergy, who also showed great heroism—stories about huge salaries were probably somewhat exaggerated. Master surgeons from major towns and cities were, however, regaled with 200 *livres* per day, plus bed and board. The standard remuneration

[21] See above, Fig. 1*a*. Cf. Jones, 'Plague and its Metaphors'. [Sénac and Chicoyneau] *Traité*, pub. as late as 1744 e.g. was a high-profile production.

[22] D. Diderot (ed.), *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers* (17 vols.; Paris, 1751–65), xii (1765), art. 'peste', 454.

[23] Carrière *et al.*, *Marseille, ville morte*, 159 ff. for a discussion of this point. Besides [Sénac and Chicoyneau], *Traité*, see G[oiffon], *Observations faites sur la peste qui règne à Marseille et dans la Provence par Messrs Bertrand et Michel, avec un avertissement par M. G**** (Lyons, 1721); and Gavet de Rumilly, *Traité de la peste, ou Conjectures physiques sur sa nature et ses causes* (Lyons, 1722).

[24] Cf. [Sénac and Chicoyneau], *Traité*, 8. For the other side of the coin, see the criticisms of the Montpellier physicians in d'Antrechaus, *Relation de la peste dont la ville de Toulon fut affligée en 1721* (Paris, 1756), 87 ff.

was 1,000 *livres* a month for physicians, 500 *livres* for surgeons.[25] These behavioural traits, often mentioned in correspondence during and volumes published after the plague, showed that for many the physician had not changed his spots.

Perhaps paradoxically, however, the Marseilles episode in 1720 was of critical importance in refurbishing medicine's prestige. The fact that human agency had brought under control what had seemed a transcendental force of nature accrued—maybe undeservedly so—to the credit of medical practitioners. The administrative programme organized by the Marseilles authorities had been based, significantly, on the text of François Ranchin, the Montpellier medical professor and consul of the city during the plague outbreak of 1629.[26] The fact that government and local authorities in 1720 regarded medical staff as such an important part of their administrative initiatives—nearly 200 medical men were drafted in to deal with the problem—suggested that, if the old mould had not been broken entirely, a new one was in the making. Over half a million *livres* was expended on medical salaries. The king indeed rewarded Chicoyneau and Verny from the Montpellier medical community with the conferral of personal nobility.

Physicians proved adept at utilizing public interest in news from the Marseilles front line, and emerged as their own best publicists, helping turn a human tragedy into a media event which could titillate the palates of an increasingly large and demanding public opinion. 'Of all classes of writers [on the 1720 plague]', noted Marseilles physician Jean-Baptiste Bertrand, 'the physicians were those who made the press most groan with their effusions'—before going on to add his own ha'penn'orth, commenting of his fellows that

> They cannot be denied the credit for having broken the ice and been the first to rise above that vain terror to which physicians in former times have yielded, in common with the rest of mankind, at the bare idea of a contagious disease. … [T]hey never shrank from personal attendance on the sick, but exposed their lives in endeavouring to give them succour with the most undaunted courage and generosity. They were the first to face the danger of the contagion, going from street to street, from house to house, examining everything, approaching the patients, feeling their pulse, … attending them in short with the same assiduity as could have been shown to a wealthy person who was labouring under a common malady and from whom they had expectations of a great reward.[27]

There was something, evidently, behind this vivid depiction of the humble, dedicated, somewhat martyrish physician, not eschewing manual work, and risking his life with unstinting disinterestedness and generosity of spirit for the

[25] Carrière *et al.*, *Marseille, ville morte*, 107. Cf. S. T. McCloy, *Government Assistance in Eighteenth-Century France* (Durham, NC, 1946), 142 n.

[26] Ranchin, *Opuscules, ou Traités divers et curieux en médecine: Histoire de la peste de Montpellier en 1629 et 1630* (Lyons, 1640).

[27] *Historical Relation*, 108.

public weal. In the past, physicians had often been among the earliest to flee plague-affected areas, and kept their distance even from their patients. 'Speaking personally', one had recorded in the late sixteenth century, 'I do not see that it is necessary for the physician to see such sick persons with his own eyes, for their sickness is well enough known.'[28] By the early eighteenth century, in contrast, physicians promoted an ethic of personal presence and visual surveillance which was deliberately linked to their public utility, as well as to the progress of their discipline. 'What gives weight to his observations', one medical writer commented of a model physician during a plague epidemic, 'is that he studied plague in the midst of plague victims: a dangerous school—but one infinitely more instructive than books.'[29] Medicine, even plague medicine, was beginning to take a more observational turn.

At Marseilles in 1720, another source recorded, the chief physician Chicoyneau

> appeared in the city and entered all the infirmaries. The beds of the plague victims did not frighten him. He approached them calmly, examined them as he would have examined a tertian fever, himself breathing the air which came from the mouths of these wretched folk. He consoled them, he fed them bouillons. He put his hands on the open buboes, he opened cadavers covered with the ravages of the disease, he scrutinized their entrails, he touched them. ... In this manner this illustrious man followed in the footsteps of the Father of Medicine.[30]

This was rhetoric, but not all rhetoric: about one-fifth of medical practitioners sent into the province on the orders of the royal government or the regional authorities died at their post (see Table 6*a*). A new image of the physician was being constructed—and its ingredients included the lives and deaths of medical men as well as their words and boasts. In order to understand how that process developed, it is important to examine the broader context of change.

B. The Pathosystem in Transition: From Mortality to Morbidity?

The lifting of the threat of plague changed the epidemiological landscape. It constituted the first step in the 'epidemiological transition': the shift from a society whose disease pattern was dominated by infectious diseases to a more modern situation where chronic diseases are prevalent.[31] Epidemic disease had

[28] Nicolas de Nancel, *Discours très-ample sur la peste* (Paris, 1581), 364.

[29] Jean Cottin, *Traité de la peste faite en faveur de la ville de Laon* (Paris, 1721 edn.) (1st pub. 1635), unpaginated 'Avertissement'. For the medicine of observation in the 18th cent., see below, esp. Ch. 7.

[30] [Sénac and Chicoyneau], *Traité*, 117. The 'Father of Medicine' is, of course, Hippocrates.

[31] For the 'epidemiological transition', see esp. A. Mercer, *Disease, Mortality and Population in Transition: Epidemiological-Demographic Change since the Eighteenth Century as Part of a Global*

TABLE 6*a*. *The Marseilles plague: medical staff sent into affected areas by the central government and the regional authorities, 1720–1722*

	No.	Death	%
Practitioners in Marseilles			
Physicians	17	3	17.7
Surgeons	97	31	32.0
Apothecaries	11	—	—
in Provence outside Marseilles			
Physicians	18	1	5.6
Surgeons	47	6	12.8
Apothecaries	7	2	28.6
TOTAL			
Physicians	35	4	11.4
Surgeons	144	37	25.7
Apothecaries	18	2	11.1
TOTAL	197	43	21.8

Source: S. T. McCloy, *Government Assistance in Eighteenth-Century France* (Durham, NC, 1946), 144 f.

now been domesticated, and made more globally homogeneous. The micro-ecologies of disease pools, whose confluence had spawned numerous 'new diseases' in the age of discoveries in the sixteenth and seventeenth centuries, were now under greater control. No new diseases appeared, though a few old stagers made a comeback. The sweats, for example, after a gap of over a century, reappeared in Montbéliard in 1712 and then spasmodically affected parts of France, especially after 1750: Languedoc is alleged to have lost 30,000 inhabitants to it in 1782. Typhus too, perhaps less visible in the late seventeenth century, staged a return in the 1740s and in the Seven Years War (1756–63) in the ranks of the mass standing armies of the absolute monarchs: indeed, it came to be known as 'camp', sometimes 'gaol', fever. Alongside these, the main diseases stayed very much in place. Dysentery, as the great epidemic of 1779 testified, was still influential.[32] Perhaps the biggest killers now were tuberculosis—whose prevalence is

Phenomenon (Leicester, 1990); and J. C. Riley, *Sickness, Recovery and Death: A History and Forecast of Ill Health* (London, 1989). In this section on the transformation of the demographic and epidemiological regimes, we are drawing heavily on the fine syntheses offered by contributors to J. Dupâquier (ed.), *Histoire de la population française*, ii. *De la Renaissance à 1789* (Paris, 1988).

[32] Dupâquier (ed.), *Histoire*, 244–7. Cf. J. P. Peter, 'Les Mots et les objets de la maladie: Remarques sur les épidémies et la médecine dans la société française de la fin du XVIIIe siècle', *Revue historique*, 246 (1971), 13–38; F. Lebrun, 'Une grande epidémie en France au XVIIIe siècle: La Dysenterie de 1779', in *Hommage à Marcel Reinhard: Sur la population française aux XVIIe et XIXe siècles* (Paris, 1973).

extremely difficult to estimate, but which seems to have been widespread in both town and country—and smallpox. It was not unknown for the latter to kill adults—it cost Louis XV his life in 1774, for example—but its heaviest effect was on young children.[33] Epidemics were frequent, and overall the disease caused perhaps a quarter of all child deaths between the ages of 1 and 4. One contemporary estimate put the number of smallpox deaths during the epidemic of 1754 at between 50,000 and 80,000.[34] Though they portrayed a gruesome tableau of suffering and death, this range of diseases did not have the air of ghastly finality of a plague attack. Though deaths from them could be legion, the remission rate was high and more individuals survived the onset of an epidemic disease than succumbed to it. This made the role of chronic diseases proportionately more significant. Deficiency diseases—scurvy, goitre, rickets—continued apparently unabated, as, at the other end of the social spectrum, did gout, gastric disorders, and apoplexy.[35]

Linked to the epidemiological transition were the beginnings of the so-called demographic transition from high to low levels of mortality and fertility. The earliest sign of the 'demographic revolution' which historians have ascribed to eighteenth-century western Europe was a change in the incidence of those 'steeples of mortality' in which deaths increased to three, four, five, or more times their normal number. The demographic or mortality crises represented by these oscillations became both fewer in number and less severe over the eighteenth century. In some localities—as at Saint-Lambert-des-Levées, made famous by Pierre Goubert's pioneering work—this alteration is clearly visible on a graph (see Fig. 6*a*).[36] In most areas, the period from 1720 or 1730 onwards saw a definite upturn after several particularly bad decades. The years 1693–4 had seen a pan-European crisis triggered by harvest failures: it was the last great demographically driven crisis in France's social and economic history, which caused as many deaths (approximately 2.8 millions) as the 1914–18 War would do, in a population half the size. Mortality levels tripled in Rouen, Lyons, Amiens; doubled in Bordeaux, Versailles, and Honfleur; were exceptionally severe in the south-east; and killed off in all perhaps 10 to 15 per cent of the population. Terrible winter conditions in 1709—rivers froze over, ink froze to quills, birds to their branches, glasses to pursed lips—caused a further crisis, which initiated bread shortages whose effects were amplified by a series of epi-

[33] P. Darmon, *La Variole, les nobles et les princes: La Petite Vérole mortelle de Louis XV* (Brussels, 1989). Cf. id., *La Longue Traque de la variole: Les Pionniers de la médecine préventive* (Paris, 1986); and Mercer, *Disease, Mortality and Population*.

[34] La Condamine, cited in D. Roche, *La France des Lumières* (Paris, 1993), 445.

[35] See above, Ch. 1, Sect. B.

[36] P. Goubert, *Beauvais et le Beauvaisis, de 1600 à 1730: Contribution à l'histoire sociale de la France du XVIIe siècle* (2 vols., Paris, 1960). See too Fig. 1*d*.

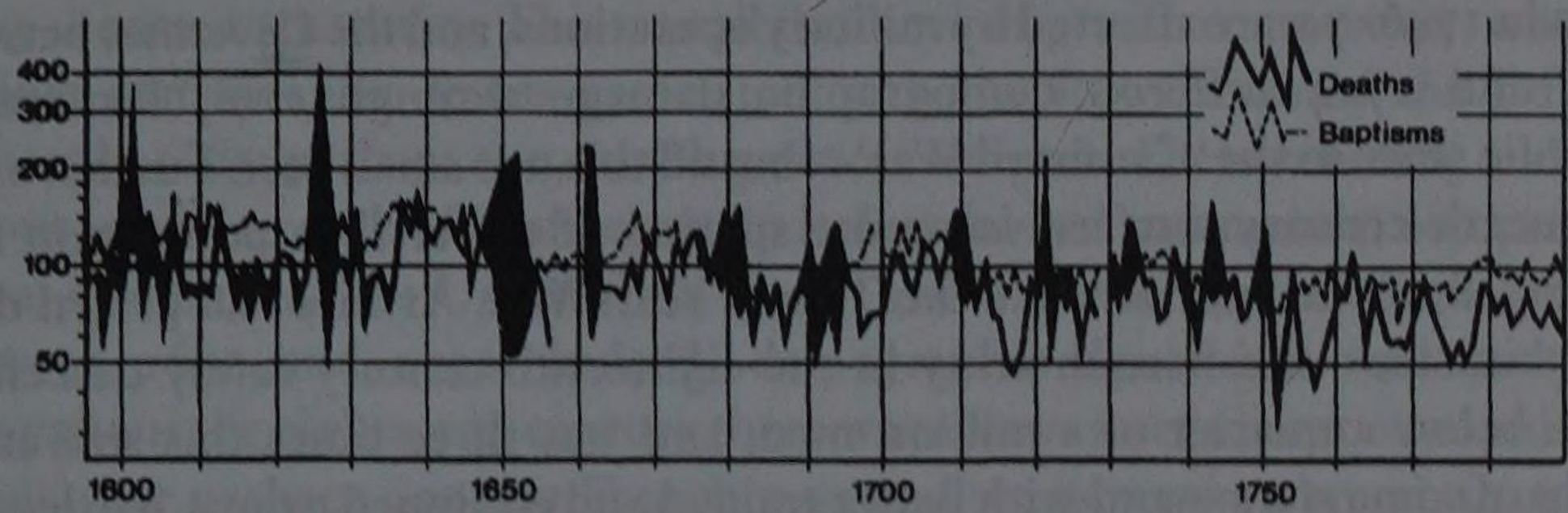


FIGURE 6*a*. The decline of mortality crises: births and deaths in Saint-Lambert-des-Levées (Maine-et-Loire)

Source: adapted from P. Goubert, *Beauvais et le Beauvaisis de 1600 à 1730: Contribution à l'histoire sociale de la France du XVIIe siècle* (2 vols.; Paris, 1960), ii. 48–9.

demics which in some areas continued down to 1715. Perhaps more intense in many grain-growing areas in northern France, the 1709 crisis spared many, especially southern and western, regions. The Midi suffered in turn in 1720 with the Marseilles plague epidemic, which killed 120,000 individuals in all: 40,000–50,000 in the city itself, and the remainder in Provence, the Comtat Venaissin, and Languedoc.[37]

In retrospect, however, it would appear that the 1720 plague epidemic was on the hinge of the shift to a new demographic pattern, in which the significance of crisis mortality was much attenuated. Unlike most plague epidemics of the past, deaths caused by associated famine in 1720 were virtually nil: the region was carefully provisioned from outside, if only so as to deprive those behind the cordon sanitaire of a further motive for trying to break out. For the vast majority of France, 1709 was to prove the last famine in their history: the eighteenth century would be marked by hunger riots, but not by starvation.[38]

Though this also was a phenomenon easiest glimpsed in retrospect, warfare too was ceasing to be the major killer it had been in the past. Following particularly high mortality associated with war in the second quarter of the seventeenth century (notably in the Thirty Years War from 1635–48 and the civil war of the Fronde from 1648–52), warfare was fought increasingly rarely on French soil. Location was critical because the greatest demographic damage was caused not by deaths in battle but through the incidental effects on the war zones of military operations (the transmission of disease, material damage to the means of production, and so on). Alsace in 1674, Lille in 1708, Provence in 1707 and then

[37] M. Lachiver, *Les Années de misère: La Famine au temps du Grand Roi* (Paris, 1991); F. Lebrun, 'Les Crises démographiques en France aux XVIIe et XVIIIe siècles', *Annales ESC*, 35 (1980), esp. 219 ff.; and Dupâquier (ed.), *Histoire*, 175 ff.

[38] G. Rudé, *The Crowd in History: A Study of Popular Disturbances in France and England, 1730–1848* (London, 1964), 20.

again in 1746–7 were affected by military operations, and the Cévennes between 1702 and 1704 suffered demographic damage through civil, Protestant–Catholic strife in the 'Camisard War'—but all this was small beer. Furthermore, eighteenth-century warfare was more sparing of the civilian population than atrocity-drenched periods like the Thirty Years War. Armies had grown drastically in size—the French army in the eighteenth century rarely descended much below a quarter of a million men, and was three times this size at the height of some wars—and with better trained and equipped troops, battle casualties tended to be higher—28,000 men had died in the Battle of Neerwinden in 1683; 33,000 at Malplaquet in 1709; and 15,000 at Fontenoy in 1745.[39] However, better bureaucratic control and the imposition of higher levels of discipline made troops less prone to engage in predatory or gratuitous violence towards civilians than in the past. Warfare, like plague, was losing its role as a major determinant of population size.[40]

A page in France's demographic history had been definitively turned. This became clear in the crisis years 1738–42, when two sets of bad harvests (1737–8, 1740–1) were separated by a very bad winter (1740) in which a serious epidemic took place.[41] This was an ideal recipe for an extremely serious crisis of the traditional sort. Yet although some areas, notably Anjou and Brittany, had serious problems, the total number of deaths was less than 10 per cent more than the national average in the 1740s as a whole. Nationwide and major regional crises were fewer as the Ancien Régime drew to a close. Epidemic disease seems to have been behind a major blip in mortality in 1747 in many areas in the Midi, and to have underlain a series of bad demographic years from the late 1770s onwards, whose lowpoint was the dysentery of 1779 which caused high levels of mortality in Brittany and the west.

With the mortality crisis increasingly a thing of the past, positive checks on population growth became less heavy, and France's population grew dramatically in size. In 1700 it was 21.5 millions and had achieved a level of 28.6 millions by 1790, a growth of roughly a third.[42] Slow in the first two decades of the century, progress was marked in the 1720s—a fact which underlined the lack of permanent damage the Marseilles plague had caused to population growth—as a 'baby boom' generation born in the wake of the demographic disasters of

[39] Lebrun, 'Crises', 213. For the size and structure of the army, see A. Corvisier, *L'Armée française à la fin du XVIIe siècle au ministère de Choiseul: Le Soldat* (2 vols.; Paris, 1964).

[40] For army size in European context, see J. Child, *Armies and Warfare in Europe, 1648–1789* (Manchester, 1982), 42. For the general evolution in the demographic resonance of warfare, see the fine demonstration in M. Gutman, *War and Rural Life in the Early Modern Low Countries* (Princeton, 1980), which presents a pattern for the Liégeois which was replicated within France.

[41] For this crisis, see J. B. Post, *Food Shortage, Climatic Variability and Epidemic Disease in Pre-Industrial Europe: The Mortality Peak in the Early 1740s* (Ithaca, NY, 1985).

[42] Dupâquier (ed.), *Histoire*, 52 ff.

1693–4 came to maturity. This was all the more impressive, moreover, when set against demographic losses associated with the Revocation of the Edict of Nantes in 1685: perhaps 140,000 Huguenots emigrated between 1685 and 1690 (about a third to each of France's main industrial and commercial competitors, Great Britain and the United Provinces), and a further 40,000–60,000 did so between 1690 and 1730. Indeed, demographic dynamism was such that throughout the eighteenth century there was always a net export of population: in any year perhaps 200,000 French men and women were abroad, usually in neighbouring European countries rather than in France's pitifully underpopulated colonies.[43] After a slackening-off in the 1740s, general growth levels were exceptionally strong from 1750 to 1778. The dysentery year of 1779 triggered a slackening-off in the early 1780s, though there were signs of recovery in the late 1780s. Overall, levels of mortality were falling: they decreased from 40.1 deaths per 1,000 head of the population in 1740–4 to 35.5 per 1,000 in 1785–9 (they had been even lower, at 33.6 per 1,000 in 1775–9)—and this trend would continue into the nineteenth century.[44]

With the ending of the great nationwide killers of past generations, population development acquired a more regionalized and nuanced pattern.[45] The Midi (notably Provence, Languedoc, Aquitaine, and the Dauphiné), which had been spared some of the worst crises of the seventeenth century, fared rather poorly over the eighteenth century, as did Normandy, Picardy, and Champagne. The fastest growing areas were in the east—notably Alsace, Lorraine, and the Franche-Comté, which were still to a considerable extent 'catching up' from the catastrophes of the early seventeenth century. The Lyonnais and the area to the south of the Paris basin also saw very high levels of population growth. Within regions there was moreover a good deal of differentiation between town and countryside. The proportion of the population living in towns (down to collectivities of just a couple of thousand inhabitants) rose from perhaps 14–15 per cent in 1600 to perhaps 20–1 per cent in 1790. In the first part of this period, much growth had been due to the sole city of Paris, which expanded from 220,000 to some 430,000 in 1650. Its growth thereafter was steady rather than spectacular: 510,000 in 1700; 570,000 in 1750; and 620,000–650,000 in 1789. In the eighteenth century most dynamism was shown at the level of major and middling provincial cities. Those which were linked to colonial and overseas trade did particularly well. Port cities overall increased their population by

[43] For migratory patterns, see esp. ibid. 129 ff., 135 ff.

[44] Ibid. 234. It is worth noting perhaps that the English pattern of demographic transition differed from that of France: in England, death rates were as low as 30 ‰ long before 1700, and the age of marriage played a more prominent role in the regulation of population size. See R. Schofield and E. A. Wrigley, *The Population History of England: A Reconstruction* (London, 1981), 314.

[45] For regional patterns, see esp. Dupâquier (ed.), *Histoire*, 75 ff.

about 50 per cent, while provincial administrative capitals grew by a more modest 21 per cent. Nantes and Bordeaux doubled in size between the reigns of Louis XIV and Louis XVI (to 80,000 and 110,000 respectively), while Lyons did virtually the same and Marseilles recovered from the 1720 episode to have a population of 110,000 by 1789. Some industrial cities—silk-producing Nîmes, for example, or Saint-Étienne—did well too, though industry was not always an invariable sign of demographic vitality: enterprising Rouen hardly grew in size at all, while new industrial cities such as Villeneuvette in Languedoc and Le Creusot marked very little progress.[46]

The overall dynamism of the urban sector in the eighteenth century lay not so much in numbers—for rural growth patterns were also strong—but rather in the role of towns as generators of greater wealth and new cultural forms. Much of the development of cities in the seventeenth century had been associated with state formation: the crown had made a massive impact on patterns of urbanization through the development of its bureaucracy and armed forces, notably with the proliferation of venal office and the building-up of military defences on the frontiers. The sedentarization of the court at first Paris, then Versailles also saw the nobility drawn more into the orbit of court and city. This signified not only a move by part of the noble élite from the peripheries to the centre but also the reorientation of a significant sector of the nobility around the routines of urban life. 'The cities', the Breton nobleman Noël du Fail had written in 1547, 'are only convenient for men of law, merchants and artisans and it can be boldly stated that when one sees a nobleman in town, he is there because he is a plaintiff or defendant, is paying off some debt or borrowing money at enormous expense, or is engaged in debauchery.'[47] The scale of noble immigration into the towns meant that sentiments like these were anachronistic by 1700 (especially in the Midi) and utterly erroneous by 1789, when the bulk of the nobility—and in particular its better-off segments—were town-based.[48]

Within the confines of the city, at least some of the nobility adopted urban and bourgeois social attitudes. In this, they were given enormous, and far from universally successful, encouragement by the state to engage in business and become a *noblesse commerçante* on the model of the entrepreneurial British nobility or the Venetian mercantile oligarchy.[49] As a result, there was evidence in

[46] For urbanization, see ibid. 86 ff., 453 ff.; and P. Benedict (ed.), *Cities and Social Change in Early Modern France* (London, 1989), esp. 24–5 for urban statistics. For Paris, besides the above, see also Dupâquier (ed.), *Histoire*, 94, and P. Chaunu, *La Mort à Paris (XVIe–XVIIe–XVIIIe siècles)* (Paris, 1978), 198.

[47] Cited in Benedict (ed.), *Cities and Social Change*, 11–12.

[48] Ibid. 30 ff. See too J. W. Konvitz, 'Does the Century 1650–1750 Constitute a Period in Urban History? The French Evidence Reviewed', *Journal of Urban History*, 14 (1988).

[49] Exemplary here is G. Richard, *Noblesse d'affaires au XVIIIe siècle* (Paris, 1974). Also useful

some locations, especially those associated with colonial trade such as Nantes and Marseilles, of closer noble involvement in trade and enterprise, and closer links with a mercantile bourgeoisie. These were often sealed by marriage alliances and business partnership and expressed themselves, as we shall see, in similar lifestyles. The nobility was by the end of the Ancien Régime playing a bold and important part in the economic life of the nation: they possessed the lion's share of the iron industry; were disproportionately well represented in coalmining; played an innovatory role in cotton and other manufacturing industries; were increasingly involved in overseas trade; and played a major role in high finance.

The noble infiltration of urban life was matched by a corresponding growth of interest in and influence over rural society by the urban bourgeoisie. This was most classically exemplified by bourgeois purchase of rural estates—both as a solid investment and also as a means of garnishing with the trappings of gentility fortunes amassed in trade, manufacturing, or finance. In addition, the development of the domestic (or 'putting-out') system meant that a great part of industrial production was situated in the countryside. This was the case, for example, at Rouen, whose very modest demographic performance in the eighteenth century—from 64,000 in 1700 to 73,000 in 1789—belied its importance as an entrepreneurial and cultural centre of the surrounding region.[50] In such circumstances, which historians identify as characterizing proto-industrialization, demographic advance was registered as much by a 'thickening' of the surrounding countryside—that is, by the rise of rural density rates in the catchment area of the city—as by urban growth *tout court*. Links between town and country were soldered together too by the continuing urban dependence on mass immigration from rural areas as a means of bolstering, let alone increasing, town size. The scale of such movement—sometimes durable, though sometimes too a feature of temporary or even transient micro-migrations—was considerable: Paris, with 20,000 stonemasons from the Limoges area on the eve of the Revolution, was pre-eminently the largest Limousin city.[51] The building industry was in fact one of the main employment markets for immigrant labour, along with the semi-skilled artisanate and the realms of domestic service whose dimensions also grew in tempo with the burgeoning prosperity of cities.

(with caution) is G. Chaussinand-Nogaret, *La Noblesse au XVIIIe siècle: De la féodalité aux lumières* (Paris, 1976).

[50] See J. P. Bardet, *Rouen aux XVIIe et XVIIIe siècles: Les Mutations d'un espace social* (Paris, 1983).

[51] Dupâquier (ed.), *Histoire*, 107–8. For the social history of urban space, see esp. G. Duby (ed.), *Histoire de la France urbaine*, iii. *La Ville classique de la Renaissance aux Révolutions* (Paris, 1981). There is a considerable literature on proto-industrialization, which may be sampled in P. Kriedte *et al.* (eds.), *Industrialization before Industrialization* (Cambridge, 1981); and M. Berg (ed.), *Markets and Manufacture in Early Industrial Europe* (London, 1991).

Commerce and manufacturing were the pilot sectors of urban growth in the eighteenth century.[52] The eighteenth century proved a golden age of commercial capitalism. Colonial trade was in the vanguard of developments: it decupled over the century, bringing massive fortunes to those who conducted it, especially in Nantes, Bordeaux, Marseilles, and Rouen which took 90 per cent of the Atlantic trade. While these urban centres specialized in West Indian trade, Marseilles also built up impressive fortunes through links with the Levant. Trade within Europe increased fivefold too, allowing cities turned towards France's land-frontier to join in the prosperity enjoyed by their coastal cousins: Strasburg increased in size from 26,500 to 50,000 over the course of the century, for example, while Lyons, the great silk centre of France, grew from 97,000 to 146,000. Trade within France was also highly dynamic, helped by canal-building and by important improvements in the road-network. Average distance times were cut by between 40 and 60 per cent in the last decades of the Ancien Régime.[53]

Closer contact and greater communication were the key to developments in the agrarian base of the economy on which French society reposed.[54] France's population had grown by a third over the course of the century, and the extra mouths had to be fed. Fed they were—an achievement all the more impressive for being made without any major technological breakthroughs and largely on the basis of foodstuffs grown within France. The agrarian revolution had to wait another day, and agricultural production rose at a tempo only marginally above that of population, totalling perhaps an increase of 40 per cent by 1789—far less spectacular than the performance of the other sectors of the economy. The presence of more food did not *ipso facto* cause famine to become a thing of the past, however: after all, local famines had occurred in the sixteenth and seventeenth centuries in years when many localities had enjoyed good harvests, just as famine persistently occurs in a twentieth-century world of mountains of unconsumed grain. As it transpired, the threat of famine was lifted, first by a more diversified agriculture and second by improved distribution.

Even before 1700, as we have seen, a more diversified agrarian economy offered a degree of insurance against famine. The correlation between high bread prices and steeples of mortality was most marked precisely in the areas of

[52] For overviews of economic development, see F. Braudel and E. Labrousse (eds.), *Histoire économique et sociale de la France*, ii. *1660–1789* (Paris, 1970); and P. Léon (ed.), *Histoire économique et sociale du monde*, iii. *Inerties et révolutions, 1730–1820* (Paris, 1978). See too F. Bayard and P. Guignet, *L'Économie française aux XVIe–XVIIe–XVIIIe siècles* (Paris, 1991) and the coverage in the outstanding synthesis by Roche, *France des Lumières*.

[53] G. Arbellot, 'La Grande Mutation des routes de France au milieu du XVIIIe siècle', *Annales ESC*, 28 (1973), 765–91, esp. the unpaginated maps.

[54] Besides the works cited above, n. 52, see G. Duby and A. Wallon (eds.), *Histoire de la France rurale*, ii. *L'Âge classique des paysans de 1340 à 1789* (Paris, 1975).

northern France which came close to being cereal monocultures.[55] Elsewhere, the presence of a diverse range of foodstuffs less likely to be ravaged by the bad weather which caused cereal harvest failures offered a protection against death through malnutrition and associated diseases. Crop diversification became even more marked in the eighteenth century. Maize, which had conquered Aquitaine by 1650, spread far and wide in the Midi throughout the century. Once peasants had got over their repugnance at consuming a tuber they thought fit mainly for pigs, the potato also made considerable progress, notably in mountainous areas such as Auvergne and from the 1770s in eastern France. The chestnut too, the pauper's bread surrogate, still had many a stronghold, notably in the Vivarais and the Limousin. Fish and seafood were available to those who lived on the coast or near to waterways. Poultry kept in the yard and vegetables grown in peasant gardens also provided a hedge against disaster in many peasant homes.[56]

Crop diversification went far beyond the requirements of self-sufficiency and local security. The vine, for example, made massive inroads into peasant-holdings throughout France, especially in the middle decades of the century.[57] Other cash crops—silk, hemp, garden vegetables—also developed apace. This highlighted the main factors preventing the continuation of famines in the eighteenth century: namely the growth of trade, ensuing improvements in communications, and the emergence of more integrated markets for every kind of goods and services. Urban development helped integrate the surrounding countryside into the social and economic circuits of a town; but the period was also characterized by the emergence of a tighter network of relationships between towns and regions. Symptomatically, the decline of great, periodic provincial fairs in this period was matched by the development of a tighter system of local, regularly held markets.[58] A degree of regional specialization developed. In Upper Languedoc, for example, landowners specialized in grain production knowing that they could market their surpluses via the region's impressive communication network, including the Canal du Midi now linking the Mediterranean, via the Garonne Valley, to the Atlantic. The same network allowed Lower Languedoc, in contrast, to move away from grain production and to engage in industrial production and viticulture, safe in the knowledge that ease of contact with the outside world would act as a buffer against local harvest failures. Such a case was not uncommon—the

[55] See above, pp. 58–9.

[56] Dupâquier (ed.), *Histoire*, 460–2; and M. Livi Bacci, *Population and Nutrition: An Essay on European Demographic History* (Cambridge, 1989), 95 ff.

[57] The classic treatment remains E. Labrousse, *La Crise de l'économie française à la fin de l'Ancien Régime et au début de la Révolution* (Paris, 1944).

[58] Braudel and Labrousse (eds.), *Histoire économique et sociale*, 185 f.

development of dairy farming in Normandy, or domestic industry around Rouen offers a similar picture.[59]

The development of capitalism in the eighteenth century was thus shifting rural society away from traditions of local autarchy towards an economy of exchange. This entailed the erosion of the customarily self-regulating relationship between population size and food supply. The greatest limiting factor on population growth in early modern France had been less, as Malthus held, the positive checks constituted by war, famine, and disease, important as these were, than the restricted availability of landed property.[60] This tended to determine the age at which a couple married since they would normally need to await the appearance of a niche in the property market before establishing a household. Thus a mass die-off in a mortality crisis was invariably followed by a rush up the aisle by couples availing themselves of newly available farm-holdings. Age at marriage was consequently traditionally late and celibacy rates high. Celibates formed a reserve army of matrimony called to the front in times of demographic hardship but otherwise deterred from marriage and biological reproduction through the lack of availability of land.

This pattern was significantly eroded by the new social and economic developments of the eighteenth century. Population growth, by markedly increasing pressure on land, made many couples defer marriage even later—indeed, levels of average age at marriage at the end of the Ancien Régime were at an all-time high; drove up rates of celibacy (which doubled over the century); and thereby increased the size of the reserve army of celibates so that they became discouraged and drifted off to the towns. On the other hand, the extension of rural industry and an increase in jobs in the cities, even if only in domestic service, encouraged some couples to marry on the basis of mobile wealth rather than landed property, thus bucking the trend of rising marriage ages. The fact that these jobs increasingly included large numbers of women and children was also significant, and workers came to calculate their budgets on a family basis, on income from both partners, and from children where possible. On the land too the extension of cash crops meant that even though property fragmented under demographic pressure, smallholdings did not have to be as large as once they had been in order to guarantee a livelihood: only 2 hectares of vines were needed to produce enough to feed a family in Alsace, as against 12 hectares in cereals.[61] Such statistics brought fortunes to peasant proprietors when times

[59] Cf. e.g. G. Frêche, *Toulouse et la région Midi-Pyrénées au siècle des Lumières (vers 1670–1789)* (Paris, 1974).

[60] This is the line of argument convincingly developed by J. Dupâquier, 'L'Auto-régulation de la population française, XVIe–XVIIIe siècles', in id. (ed.), *Histoire*, 413 ff. For developments in the 18th cent., see J. Y. Grenier and J. Dupâquier, 'Croissance et déstabilisation', ibid. 437 ff.

[61] Dupâquier (ed.), *Histoire*, 462.

were good, and utter desolation if, as happened from the late 1770s, the demand for wine slumped and prices fell.[62]

The development of capitalism thus effectively destabilized the self-regulatory system balancing economic resources and population size. It caused demographic comportment to change in ways which could not be explained simply by the ebb and flow of a homeostatic system. The spurt of population between 1750 and 1778 produced 3.2 million births. Moreover, the central place of marriage in reproduction was being seriously challenged for the first time in centuries by the growth of illegitimacy, as the success of the post-Tridentine clerical campaign to regulate sexual morals was being eroded by the new mobility and the less stable access to property. Overall, illegitimacy rose by 46 per cent in the last half-century of the Ancien Régime. The rate of increase (though not the level) was even higher in the countryside than in the towns: it rose from 1 to 1.9 per cent in rural areas, as against 7.3 to 7.9 per cent in the towns. In some, usually larger, cities rates of between 15 and 30 per cent were not unknown by the last years of the Ancien Régime. Prenuptial pregnancies were also on the rise, increasing by 42 per cent—even higher in the case of women over 25 years old.[63] Child abandonment became an increasing worry. The children unceremoniously dumped outside hospital and monastery walls were illegitimate in the majority, but contained a good admixture—nearly 40 per cent in the case of Nantes—of legitimate children of parents in reduced straits. The number of abandonments increased vertiginously over the century: the 100 per cent increase between the 1740s and 1780s does not measure the full breadth of a phenomenon which had been at rather low levels in the seventeenth century. The annual number of admissions to the Enfants Trouvés hospital in Paris rose from around 2,000 at the end of the seventeenth century to some 7,676 in 1772. Numbers fell away thereafter, stabilizing at 5,000 or 6,000 per annum, as the government took steps to control the baby-farming system under which women brought foundlings *en masse* to Paris from outlying provinces to dump them at the hospital. But this was only displacing the problem towards provincial hospitals. The number of foundlings quadrupled at Rennes between 1767 and 1780.[64] The rise of abandonments might have been higher still had not urban populations, and perhaps (historians are divided on the issue) their rural cousins, begun to practise coitus interruptus so as to keep family size within the bounds of a family's material expectations.[65]

[62] Labrousse, *Crise*, 336 f.

[63] For illegitimacy and prenuptial pregnancies, see Dupâquier (ed.), *Histoire*, 313 ff., 472–3.

[64] Ibid. 472–3, 481 ff. Cf. C. Delasselle, 'Abandoned Children in Eighteenth-Century Paris', in R. Forster and O. Ranum (eds.), *Deviants and the Abandoned in French Society* (Baltimore, 1978).

[65] Contrast D. R. Weir, *Fertility Transition in Rural France 1740–1829* (Ann Arbor, 1983) with A. Bideau *et al.*, 'La Fécondité', in Dupâquier, *Histoire*, 349 ff.

Towns were especially marked by problems which sprang out of social and economic developments. Illegitimacy and child-abandonment were urban phenomena—partly because of a village wall of shame which drove pregnant country spinsters townwards. Urban populations also registered more fully the effects of population mobility and exchange. Cities had a speedier turnover of inhabitants than formerly: the number of migrants doubled over the century in Bordeaux, Caen, Lyons, and elsewhere. Paris took on the aspect of a human bazaar, where every type of provincial found his or her niche.[66] Beggars and vagrants were from 1767 rounded up by the state mounted police, or *maréchaussée*, and deposited in the state-run, town-based *dépôts de mendicité*, which offered a regime of short, sharp shocks aimed at deterring criminal and deviant behaviour. Prostitution became an industry in some localities, notably in garrison and university towns. In Paris, it was effectively run by the police. There were 20,000 prostitutes in the city, and by the end of the Ancien Régime the number seemed to be getting bigger, as younger and younger women were attracted to the trade. These variegated forms of rootlessness, lawlessness, and deviance—swiftly condemned by contemporary moralists—seemed to be particularly associated with the big city, which was viewed as the site of aberrant social and demographic behaviour.[67]

The development of the market had thus sounded the death-knell of famine. Yet its consequences were far from uniformly positive. Over the century, the social élite grew in size—the bourgeoisie, for example, seems to have tripled, from 0.7 or 0.8 millions to 2.3 millions[68]—and in girth too: portraiture reveals a clear fattening-up in the wake of better and more variegated food supply. At the other end of the scale, however, the process also institutionalized hunger and want. While prices rose over the century by some two-thirds, wages failed to keep pace, with a result that the purchasing power of wage-earners was eroded by up to 25 per cent. The growth of commercial capitalism had the effect not only of depressing the living standards of many groups, but also of causing oscillations in living standards whose rhythm was set by the ebbs and flows of the trade cycle. The golden years of the French economy in the 1750s and 1760s were followed by much tougher times in the 1770s and 1780s.

The demographic developments of the period, which helped to fire economic

[66] For Paris, see esp. D. Roche, *The People of Paris: An Essay in Popular Culture in the Eighteenth Century* (Leamington Spa, 1987), 21 ff.; plus Benedict (ed.), *Cities and Social Change*, 13 ff.

[67] For begging and vagrancy, see R. Schwartz, *Policing the Poor in Eighteenth-Century France* (Chapel Hill, NC, 1988) and T. M. Adams, *Bureaucrats and Beggars: French Social Policy in the Age of Enlightenment* (New York, 1990). For prostitution, see E. Bénabou, *La Prostitution et la police des mœurs au XVIIIe siècle* (Paris, 1987) and C. Jones, *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989), ch. 7. For the pathology of the big city, see e.g. Roche, *People of Paris*, esp. 44 f.

[68] Braudel and Labrousse (eds.), *Histoire économique et sociale*, 607.

and social change, were also a mixed blessing in terms of the nation's health. Syllogistically, the ending of the periodic massacres inflicted by plague (and war and famine of course) meant that more individuals now survived. The welcome rise in life expectancy—which, for men, went from 23.8 to 27.5 years between the 1740s and 1780s (and from 25.7 to 28.1 for women)—was good news, but qualified good news, for biological survival was not synonymous with greater physical wellbeing. By some kind of pathosystemic trade-off, French men and women got an extra tranche of years of life in the eighteenth century, but more sickness too.[69] The decline of plague was balanced by the continuation of other diseases and medical conditions which affected health, while not so systematically resulting in death. Thus the end of plague did not mean a general improvement in health for all: on the contrary, it increased the numbers of individuals suffering from chronic illness and whose lives might have been ended by a visitation of the disease. A new equation was thus developing: economic and epidemiological conditions permitted far higher levels of population—but of a population more prey to other forms of disease and more generally vulnerable to penury and want.

The main demographic problem characteristic of France's pathosystem in the sixteenth and seventeenth centuries had been mortality. As a result of the first blossoms of the epidemiological and demographic transitions, that of the eighteenth century was, increasingly, morbidity. What was at issue was less the certainty of death than the material noxiousness of life in society for large numbers of the community. The morbidity issue had, moreover, two distinctive dimensions. First, questions of how best to deal with, manage, and maybe avoid mass morbidity and to improve the general health of the poorer classes became increasingly the subject of public debate and, in addition, an object of administration within the purview of government. Second, the generalized passage from mortality to morbidity was felt particularly acutely by the social élite: larger in numbers, wealthier, better-nourished, freer of death at the hands of infectious disease than they had ever been before, the nobility and bourgeoisie had more time, money, and (paradoxically perhaps) incentive to concern themselves with health matters. The shift away from a pathosystem overpoweringly marked by deadly infectious disease was thus characterized by a kind of diffuse hypochondria. This was epitomized above all by the development of 'diseases of civilization': the urban and urbane lifestyles of the social élite bred a new awareness of the dangers of nervous disorders.[70]

[69] Dupâquier (ed.), *Histoire*, 236. Also helpful figures here are those for life expectancy at the age of 5: before 1750 40.25 (m) and 41.2 (f); post-1750 44.5 and 44.3 respectively: Roche, *France des Lumières*, 442.

[70] An excellent introd. and overview is provided in R. Porter, 'Diseases of Civilization', in W. F. Bynum and R. Porter (eds.), *Companion Encyclopaedia of the History of Medicine* (2 vols.; London, 1993), i. 585 ff.

Changes in the pathosystem thus comprised a fundamental contextual factor affecting the practice of medicine in eighteenth-century France. Whether, first, through the larger numbers of pauperized individuals who constituted a national health threat, or, second, through the fact of the social groups who normally patronized them increasing their perceived health needs, trained medical practitioners were potentially in a strong position to benefit from a developing sensitivity to health issues and a growing demand for medical services. As health became a serious focus of concern of both state and élite, the status of the physician could not fail to grow.

C. The Enlightenment

Economic and demographic developments which produced a larger, longer-living, and wealthier French élite were doubly significant for occurring in an era of profound ideological and cultural ferment. On their own, material changes in the structure and affluence of the French population might only have had a limited impact on attitudes towards health and disease: after all, the period from *c.*1450 to *c.*1550 had been characterized by economic and demographic expansion, but little apparent shift in attitudes towards health. That in the eighteenth century the well-to-do became determinedly concerned with health issues owed much to the fact that they were now, for the first time, able to think about bodily health without inviting disapproval from the guardians of the country's conscience. This they owed to the movement of ideas known as the Enlightenment.

The promoters of the new movement—swiftly known as 'les Lumières'—characteristically conceived of themselves as shedding light and warmth on a culturally benighted country, and launched a full-scale attack on the Augustinian values which had dominated the world-view of the élite throughout the sixteenth and seventeenth centuries. Augustinian Christianity had stressed human depravity, and offered little prospect of universal moral and material improvement. Although theologians might argue over the degree of corruption—Protestants and Jansenists tended to be much more pessimistic than Jesuits—all Christian denominations in the era of the Reformation and Counter-Reformation had accepted that life was a vale of tears that had to be suffered in the hope of eternal life.[71] The few who questioned this ideological predisposition, notably

[71] The Jansenists accused the Jesuits of being neo-pagans on the grounds that they saw post-lapsarian man in far too rosy a light. In practice, the Jesuits had as jaundiced a view of man's natural capacities as anyone else; what divided them from the Jansenists and Calvinists was their belief that God gave every individual sufficient grace to obey his moral law, even if they did not do so, and perhaps could not do so without a special efficient grace, whereas their opponents believed that God gave the grace to do good arbitrarily or only to those individuals he intended to save. For

Neoplatonists and Paracelsians, were regarded with deep suspicion, dismissed as atheists, and sporadically persecuted.[72] In the eighteenth century, in contrast, the tables were turned. The traditional Christian world-view came under serious attack from that growing band of lay and clerical critics known to contemporaries as the *philosophes*, who articulated a much more positive conception of human potential and, implicitly, a rationalistic critique of prescriptive forms of authority. Admittedly the Augustinian tradition was never supplanted, for it continued to be promoted by the French Catholic Church through the faculties of theology and seminaries, and was fiercely propounded by the Jansenist press.[73] None the less, the new ideology was powerful and aggressive enough by 1789 to constitute a cultural movement which, both to its supporters and, subsequently, to historians, embodied the spirit of the age.

Defining the Enlightenment is notoriously difficult, all the more in that the movement, if traditionally associated with France, was a European phenomenon, albeit one with particular national characteristics. In France, the movement was the creation and property of a group of several hundred writers and thinkers whose collective heart was the Paris salon, even if many lived much of the time in the provinces.[74] Its membership was socially fluid, including nobles

the Augustinian critique of Jesuit theology and ethics, see B. Rogers, 'Augustinian Political Theory from Montaigne to Mandeville', D.Phil. diss., Oxford, 1995. For a brief introd. to the various views on grace in 17th-cent. France, see L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), 247–58.

[72] Vanini's fate—burnt at Toulouse in 1617—was unusual, but those who emphasized human potentiality had to tread carefully for fear of being accused of being in league with the devil or of being an atheist: hence Descartes's care to present himself as theologically orthodox. Theologians saw atheists everywhere: see A. C. Kors, *Atheism in France, 1650–1729*, i. *The Orthodox Sources of Disbelief* (Princeton, 1990).

[73] The Jansenist wing of the Catholic Church became even more vocal in the 18th cent., despite efforts by both Church and State to stamp it out. The standard account remains E. Préclin, *Les Jansénistes du XVIIIe siècle et la constitution civile du clergé, le développement du richérisme, sa propagation dans le bas-clergé (1713–1791)* (Paris, 1929). See also B. R. Kreiser, *Miracles, Convulsions and Ecclesiastical Politics in Early Eighteenth-Century Paris* (Princeton, 1978). Richerism was a movement for representation within the Church. The Jansenists had their own journal, the *Nouvelles Ecclésiastiques*, which continually hunted for the slightest sign of deviation from Augustinian orthodoxy: see C. B. O'Keefe, *Contemporary Reactions to the Enlightenment, 1728–1762* (Paris, 1974).

[74] Robert Darnton has estimated that there were some 2,000 authors on the eve of the French Revolution: R. Darnton, 'The Facts of Literary Life in Eighteenth-Century France', in K. M. Baker (ed.), *The Political Culture of the Old Régime* (Oxford, 1988), 266. The *philosophes* were thus always a minority among the *gens de lettres*, although their ideas had a general impact. There is no first-class account of the French Enlightenment. The best introd. is now D. Outram, *The Enlightenment* (Cambridge, 1995), though N. Hampson, *The Enlightenment* (Harmondsworth, 1976), remains a solid overview. See too the recent, very salon-centred account of D. Goodman, *The Republic of Letters: A Cultural History of the French Enlightenment* (Ithaca, NY, 1994). The most influential portrait of the movement in this century is E. Cassirer, *The Philosophy of the Enlightenment*, Engl. trans. (Princeton, 1951). The fullest and best account to date is P. Gay, *The*

and commoners, but occupationally closed: the majority had had a university education and most were, or had been, what one can very loosely call professionals: ecclesiastics, lawyers, functionaries, army officers, physicians, surgeons, and so on. The movement is perhaps best characterized by a prevailing mood rather than a fixed set of ideas. The *philosophes* refused to believe that human beings were condemned by the Fall to live in moral and material squalor until the last trump, being only prevented from tearing each other to pieces by the omnipresent fear of punishment in this world and the next if God's laws were transgressed. Rather, they believed, members of the élite (if not humankind generally) naturally had the intellectual resources to control both their antisocial passions and their environment without the aid of divine grace, and thereby had the capacity, if not quite to build heaven on earth, at least to live a happy and fulfilled life.[75]

The French Enlightenment is often held to have begun with the publication in 1721 of Montesquieu's *Lettres persanes*, a work that not only attacked the Christian state of Louis XIV for its profligacy, hypocrisy, decadence, and bellicosity but also hinted at the possibility of a much more moral and prosperous polity built on reason. It was only at mid-century, however, that the Enlightenment really burgeoned, with the publication in the space of two decades of a number of more radical works: Diderot's *Pensées philosophiques* (1746), Montesquieu's *De l'Esprit des lois* (1748), Voltaire's *Candide* (1759) and *Dictionnaire philosophique* (1763), and Rousseau's *Émile* and *Du Contrat social* (1762). It was in this period too that d'Alembert and Diderot conceived and organized the publication of the *Encyclopédie* (1751–65). This was a gargantuan enterprise which involved virtually all the members of the *philosophe* community, and aimed to lay the foundations of a happier and richer world by publishing an accurate and readable account of the sum of human knowledge in the arts and sciences.[76]

The key to both moral and material progress, it was now held, lay in the close empirical study of Man (the gendered substantive was general) and Nature, independent of all received opinion. *Philosophes* prided themselves on being disciples of the seventeenth-century English empiricist philosophers Bacon and Locke, and attacked aprioristic thinkers—notably Aristotle and Descartes—as

Enlightenment: An Interpretation (2 vols.; London, 1973). For the different national Enlightenments, see R. Porter and M. Teich (eds.), *The Enlightenment in National Context* (Cambridge, 1981): see esp. ch. 3 (by N. Hampson) on France.

[75] Hence Becker's claim that the *philosophes* had merely inverted the medieval world-view: see C. Becker, *The Heavenly City of the Eighteenth-Century Philosophers* (New Haven, 1932).

[76] Its full title was the *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers*. See J. Lough, *The 'Encyclopédie'* (London, 1971); and R. Darnton, *The Business of Enlightenment: A Publishing History of the Encyclopédie* (Cambridge, Mass., 1980).

vain systematizers.[77] Once man's nature and needs had been fully ascertained, it would be possible to understand the moral laws by which he should live to ensure his personal happiness, and the social and political organization best suited to promote the general good. Once the structure of the natural world was rightly understood, then the information could be harnessed to improve the quality of life. In the case of the physical sciences, progress had already started, for although chemistry and biology were still in their infancy, the experimental philosophers of the previous century (notably Isaac Newton) had already begun to uncover the laws of the universe. Indeed, it was the successful application of an empirico-mathematical methodology to the study of the natural world which convinced the *philosophes* of the need to extend its use to human society. The Enlightenment and the ongoing Scientific Revolution cannot be separated. The *philosophes* were not only deeply interested in the achievements of contemporary experimental philosophers; a number, notably the mathematician d'Alembert, were actively involved in the enterprise.[78] An empirical science of man, however, had still to be constructed, for the French in the eighteenth century, like other Europeans, remained largely enslaved by an ethical and socio-political theory built on the twin foundations of Aristotle and Revelation. Admittedly, some of the more conservative *philosophes* were far from wedded to building a science of man if its rationale was to liberate, even if only incompletely, man's sexual and acquisitive passions. But they wholeheartedly accepted that the new science could provide the key to material prosperity, and they shared the belief of their more radical brethren that inappropriate social, economic, and political institutions could have a deleterious effect on a country's moral and material health. All the *philosophes* were determinists to a certain extent. An individual's behaviour might no longer be shaped by Original Sin (or not so catastrophically), but it was certainly conditioned by his or her social context.[79]

The *philosophes* were confident that humans would ultimately have the knowledge to build a better world. In consequence, they were optimists. This did not mean that they were content with the status quo, although individuals

[77] See esp. d'Alembert's pref. to *Encyclopédie*, i (1751). For Locke in France, see J. Yolton, *Locke and French Materialism* (Oxford, 1991). Cartesianism was stronger in Germany among Enlightenment thinkers: see Porter and Teich (eds.), *Enlightenment in National Context*, chs. 7–11.

[78] The close connection between the Enlightenment and the new, esp. Newtonian, science has been recognized since Cassirer's *Philosophy of the Enlightenment*. For the fecundity of 18th-cent. natural philosophy, see R. Porter and G. S. Rousseau (eds.), *The Ferment of Knowledge* (Cambridge, 1980).

[79] A useful introd. to the ethical thought of the *philosophes* and the pursuit of the natural is L. G. Crocker, *An Age of Crisis: Man and World in Eighteenth-Century French Thought* (Baltimore, 1959). See too J. Ehrard, *L'Idée de nature en France dans la première moitié du XVIIIe siècle* (2 vols.; Paris, 1963).

might only quarrel with certain aspects of their contemporary world. In his novella *Candide*, Voltaire savagely satirized the viewpoint of more complacent members of the wider European movement, like Pope, who held that this was the best of all possible worlds. To Voltaire, the mid-eighteenth century was an age of misery and cruelty, not happiness. Yet he could end his novella on an optimistic note, calling on his readers to give up pointless speculation about the purpose of evil and get on with 'cultivating their gardens'.[80] The *philosophes* were, then, meliorists who believed that change for the better was possible over time, and they maintained this belief in the darkest hour. The most famous, and poignant, hymn to Enlightenment progress would be penned by Condorcet when in hiding during the Terror in 1793.[81]

Whilst emphasizing, in complete contrast to the Augustinian Christian tradition, man's ability to change the world, the *philosophes* were not usually atheists and moral relativists, as their opponents invariably claimed. There were some *philosophes* who denied the existence of a transcendent God distinct from the universe—notably Helvétius, grandson of the popularizer of ipecacuanha, and the baron d'Holbach (1723–89)—but they formed an insignificant, if overnotorious, coterie within the movement.[82] Rather, nearly all *philosophes* followed Voltaire in believing that a Creator God existed, that his power and intelligence were manifested in the structure of the universe, and that right and wrong were absolutes. On the other hand, most leading *philosophes* were anti-Christian. Refusing to accept that a deeper knowledge of God, his divine purpose and the fate, indeed the existence, of the soul could be known through reason, figures like Voltaire also refused to accept that such knowledge could be known through a specific divine revelation. The Bible, especially the Old Testament, was dismissed as a series of fictions with no greater status than the holy texts of other religions, while Christianity as a cult was ridiculed as a fraud created to establish the power and wealth of priests.[83]

[80] For a detailed study of *Candide*, see I. Wade, *Voltaire and Candide: A Study in the Fusion of History, Art and Philosophy* (Princeton, 1959). The subtitle of Voltaire's work was 'Optimisme', but Voltaire's target was less the *philosophes* than those, like the eponymous Candide's teacher Pangloss, who thought the garden would look after itself. For the strand of complacency in the European Enlightenment, see W. H. Barber, *Leibniz in France, From Arnauld to Voltaire: A Study in French Reactions to Leibnizianism, 1670–1760* (Oxford, 1955). Alexander Pope popularized the view that 'Whatever is, is right' in his poem *Essay on Man* (1733).

[81] Marquis de Condorcet, *Esquisse d'un tableau historique des progrès de l'esprit humain*, ed. O. H. Prior (Paris, 1970) (composed 1793); analysed in K. M. Baker, *Condorcet: From Natural Philosophy to Social Mathematics* (Chicago, 1975).

[82] Even the group who met at Holbach's Paris salon were not usually atheists: see A. C. Kors, *D'Holbach's Coterie: An Enlightenment in Paris* (Princeton, 1976). On Helvétius, see D. W. Smith, *Helvétius: A Study in Persecution* (Oxford, 1965); and for his grandfather, see below, Ch. 10, Sect. A.

[83] The fullest account of Voltaire's position is R. Pomeau, *La Religion de Voltaire* (Paris, 1956). Diderot refused to believe that there was any rational foundation for God's existence, but he was

Yet it would be wrong to see the archetypical French *philosophe* as a simple deist. In this respect, Voltaire was uncharacteristic of the movement, for many of the less well-known representatives of the French Enlightenment, especially French-speaking Protestants from Switzerland, remained committed Christians and biblical fideists who were scandalized by the attacks on the sanctity of divine revelation.[84] What distinguished the Christian *philosophe* from his Augustinian brother was his attitude towards theological dogma. A Christian *philosophe*, Protestant or Catholic, accepted that the theological issues which divided the Churches were generally the creation of humankind. Just as stridently as the deists, they denounced theological speculation as the source of intolerance and man's inhumanity to man, and cried a plague on all their houses. Instead they placed an emphasis on Christianity as an ethical creed and Christ as not so much the redeemer as an ideal man, whose life could and should be imitated. In France, the Christian *philosophes*' link with the leaders of the movement was the Genevan-born Jean Jacques Rousseau (1712–78), whose *Confessions d'un vicaire savoyard*, which appeared in his educational treatise *Émile* (1762), summed up their tolerant, optimistic, and human-centred Christian belief. Rousseau was not even an orthodox Christian, for he was a deist and biblical sceptic, but he had no time for Voltaire's abstract, distant God. A church-going Calvinist (after a youthful flirtation with Catholicism), he believed in a providentialist and beneficent deity, argued for the immortality of the soul, and venerated Christ as the perfect human being.[85]

The archetypical *philosophe* then was an undogmatic Christian who believed that men had an ability and not just a duty to promote the well-being of their fellows. As such, the movement in its heyday in the middle decades of the eighteenth century was not such a dire threat to the hegemony of the Catholic Church as has traditionally been supposed, except to the extent that its supporters disliked the persecution of Protestants and thought the money spent on traditional forms of piety, such as lavish funerals, beautifying churches, and masses for the dead could be put to much better uses.[86] Yet though most *philosophes* supported the principle of religious toleration, it was only from the

unwilling to commit himself totally to an atheistical position and saw a social danger in preaching moral relativism. The most recent account of his views is P. N. Furbank, *Diderot: A Critical Biography* (London, 1992).

[84] The most obvious figure is the naturalist Charles Bonnet: see his *Mémoires autobiographiques* (Paris, 1948). Another ex. is Voltaire's physician, the Genevan Théodore Tronchin (1709–81), who was extremely antagonized by his patron's irreligion: see R. Pomeau, *Voltaire en son temps*, v. *On a voulu l'enterrer* (Oxford, 1994), esp. 321 f., for Tronchin's account of Voltaire's agitation on his death-bed.

[85] See esp. R. Grimsley, *Rousseau and the Religious Quest* (London, 1968), as well as Rousseau's own mendacious *Confessions*.

[86] For the decline in baroque piety, see below, Ch. 1, Sect. D.

1760s and 1770s that they began to be concerned, and to mobilize, about the persecution of Protestants under Voltaire's famous slogan 'Ecrasez l'infâme' ('Eradicate the infamy' (of the Church's intolerance)). Even then Voltaire and his allies were unwilling to allow Protestants the right to worship openly, for they saw confessional pluralism as a threat to national cohesion.[87]

National cohesion was thought to require a strong state. The *philosophes* as a group tended not to be as antagonistic to the Bourbon regime as, especially after 1789, they were often accused of being. While all *philosophes*, with the notable exception of the marquis de Sade, dreamt of a future where morally autonomous members of the élite could live happily together in social harmony, few before the last decade or so of the Ancien Régime were so dewy-eyed as to believe that the lower orders would ever be sufficiently rational to organize their own existence. Rousseau's *Social Contract* of 1762 may have argued that the only legitimate political society was a direct democracy, but few *philosophes* took the work to be a serious blueprint for reform or a tract for the times.[88] A strong state was regarded as essential in upholding right moral principles and demonstrating to the *hoi polloi* wherein happiness lay. This tended to push the movement towards seeing enlightened (and if necessary absolutist) monarchy as a potential motor behind rational change within society. Although the *philosophes* generally and routinely denounced tyranny, most were equally suspicious of representative forms of government that historically in Europe seemed to be monopolized by sectional interests. When Montesquieu in his *De l'Esprit des lois* suggested ways in which the French absolute monarchy could be prevented from slipping into tyranny by increasing the power of the French *parlements*, he was attacked by his *philosophe* friends as a traitor to the cause of Enlightenment. The *philosophes* could appreciate the value of consultative bodies on questions of taxation, but they wanted a government which could govern positively and create the conditions for a better society. By tradition, representative bodies, such as the Paris Parlement, were conservative spoilers which inhibited rather than promoted creative government.[89]

The *philosophes* hoped that the material well-being of French society would be transformed once the venal, corporative, privileged, and closed world of the

[87] G. Adams, *The Huguenots and French Opinion, 1685–1787* (Waterloo, Ont., 1992).

[88] For the *philosophes*' paternalistic attitude towards the majority of Frenchmen, see H. C. Payne, *The Philosophes and the People* (New Haven, 1976). For Rousseau's political theory, see R. D. Masters, *The Political Philosophy of Rousseau* (Princeton, 1976).

[89] The standard account of *philosophe* political thought is still K. Martin, *French Liberal Thought in the Eighteenth Century: A Study of Political Thought from Bayle to Condorcet* (3rd edn.; New York, 1963). See also P. Gay, *Voltaire's Politics: The Poet as Realist* (2nd edn., New York, 1959). On Montesquieu, T. L. Pangle, *Montesquieu's Philosophy of Liberalism: A Commentary on 'The Spirit of the Laws'* (Chicago, 1973) is a worthwhile study. The *parlements* tended, moreover, to support Jansenism, which put them doubly beyond the pale.

Ancien Régime was dismantled. This might have developed into an out-and-out attack on absolutism, but it rarely did so. All the most heavily criticized features of traditional French society—censorship, tax inequalities, aristocratic dominance of the chief posts in the army, Church, administration, and court, and the restraints placed on economic freedom by the guilds and professional corporations—might well have been laid at the door of the absolute monarchy, which endorsed (and had often instigated) them. So too could have the state's penchant for dynastic wars—another target of *philosophe* criticism. Yet it was paradoxically from the state that the *philosophes* invariably expected reforms to come, so as to clear away these abuses and end governmental inefficiency and corruption, moral delinquency, and economic stagnation.

The tendency to look for moral and material progress to be powered by the absolutist state was particularly strong, moreover, in that section of the *philosophe* movement which most systematically endeavoured to ground its aspirations in hard social and economic analysis, namely the physiocrats. The latter were a coterie of enlightened nobles and officials, prominent among whom was the surgeon-turned-physician François Quesnay (1694–1774), who began to publish from the 1750s onwards, developing powerful support in governmental circles in the 1760s and 1770s.[90] Physiocratic theories stressed the role of the state as arbiter over a level playing-field created by the removal of unjustifiable privilege and in which policies of *laissez-faire* liberalism prevailed. They were free with their criticisms of the kind of state economic interventionism championed by Colbert and the mercantilists since the late seventeenth century. In practice, however, the tradition of state paternalism ran deep, and the physiocratic influence accommodated a good deal of 'enlightened' state interventionism. This tendency was strengthened, moreover, by the growing influence of cameralist thinking in government circles from the 1770s onwards, which placed great store by the achievement of social and economic progress through rational governmental administration: *police* or *Polizei*, to give the concept its French and German referents.[91] Marie-Antoinette, daughter of the Austrian Empress Maria Theresa, had brought cameralism in her trousseau when she arrived at the French court in 1771 to marry the future Louis XVI, and her support stimulated the younger generation of the *philosophes* to refocus their

[90] The classic expression of physiocracy was Quesnay's *Tableau économique* (1758). On the movement as a whole, see esp. R. L. Meek, *The Economics of Physiocracy: Essays and Translations* (London, 1962); E. Fox-Genovese, *The Origins of Physiocracy* (Ithaca, NY, 1976); and G. Vaggi, *The Economics of François Quesnay* (London, 1987).

[91] For the French tradition of *police*, see S. L. Kaplan, *Bread, Politics and Political Economy in the Reign of Louis XV* (2 vols.; The Hague, 1976), i. 6 ff.; and for the German concept of *Polizei*, as administrative science, cf. M. Raeff, 'The Well-Ordered Police State and the Development of Modernity in Seventeenth- and Eighteenth-Century Europe: An Attempt at a Comparative Approach', *American Historical Review*, 80 (1975), 1221–43.

interest on utilizing the state as a vehicle for promoting material happiness. As we shall see, cameralism was particularly attractive to enlightened physicians such as the Queen's personal doctor Félix Vicq d'Azyr (1748–94), who were eager to utilize the power of the state to improve public health.[92]

As we shall suggest, the intellectual ethos of the Enlightenment sustained strong symbiotic links with underlying changes which were taking place over the eighteenth century in élite, and to some extent popular, *mentalités* as regards some very basic meanings of life and death.[93] It was also pregnant with significance for attitudes towards health and disease. In the dominant Augustinian intellectual culture of the sixteenth and seventeenth centuries, ill health—like ugliness, poverty, and other afflictions—were crosses that had to be borne. Indeed in the eyes of many a moralist, ill health was a positive virtue in that it encouraged the sick to turn their attention to the world to come. It was not simply a scourge sent by God to punish men for Adam's sin and their own, but also a divine gift to lead the fallen to righteousness.[94] The *philosophes*' this-worldly philosophy, in contrast, promoted a radically different conception of health, which was now figured as the key to terrestrial happiness. Without it, individuals were unable to fulfil their potential, and they became a trial to their friends and useless to society. Societal felicity seemed to be at stake: as Diderot noted, 'public health is perhaps the most important of all subjects. If men are poor, the sovereign protects only the wretched; if they are sickly, he conserves only the ill.'[95] Many of the *philosophes* were themselves indubitably hypochondriacal: Voltaire, for example, claimed to have read as many medical books as Don Quixote had on chivalry. Though he and his fellows tended to an extreme scepticism of the contemporary arts of the physician, they sheltered few doubts about the potential of a reformed physic to help in the construction of a new society based on the conquest of disease. Drudge of the faculties under the old system, medicine was now to become the queen of the sciences.[96]

[92] See below, esp. Ch. 12, Sect. D. For the German context of cameralism, see J. Bruckner, *Staatswissenschaft, Kameralismus und Naturrecht* (Berlin, 1977). For the way in which physiocratically tinged doctrines managed to accommodate state interventionism, see esp. C. C. Gillispie, *Science and Polity in France at the end of the Old Régime* (Princeton, 1980); and for an ex. of cameralism v. physiocracy in the field of economic policy, cf. J. F. Bosher, *The Single-Duty Project* (London, 1964).

[93] See below, esp. Sect. E.

[94] For a thorough and insightful account of why God afflicts the virtuous with illness, see the views of the Jesuit Étienne Binet, in his *Consolation et resjouissance pour les malades et personnes affligées* (6th edn., Paris, 1624), esp. ch. 1.

[95] 'Plan d'une université par le gouvernement de Russie ou d'une éducation publique dans toutes les sciences', in *Œuvres complètes*, ed. J. Assézat (20 vols.; Paris, 1875–7), iii. 497.

[96] See esp. P. Gay, 'The Enlightenment as Medicine and Cure' in W. H. Barber *et al.* (eds.), *The Age of Enlightenment: Studies Presented to Theodore Besterman* (London, 1967). Rousseau's *Confessions* are a touching chronicle of anxiety about the author's own health. The obverse of the

D. Medicine and the Bourgeois Public Sphere

Health became an issue in the eighteenth century partly because of altered demographic and economic conditions, partly because of the profound transformation of the intellectual atmosphere achieved by the Enlightenment, but partly too because of related changes in the broader social, cultural, and political environment. It was not simply that a new ideology stressing the legitimacy of the pursuit of natural prosperity and happiness had come into existence; in addition, new means were evolving to mould that message, and to take it much further within French society.

The new spirit of reciprocity and exchange which pulsated through markets for goods and services was matched by a related intensification of cultural life in the broadest sense. The intellectual and artistic transactions which made up the core of Enlightenment culture took place in an expanded and vitalized social space which, following the fruitful and influential suggestion of German sociologist Jurgen Habermas, we may classify as a 'bourgeois public sphere'.[97] The term signifies the emergence of a new arena for debate and discussion not contained within the formal symmetries, courtly rituals, and corporative fixities of the absolutist state—and indeed increasingly critical of them. Rooted in the transformation of social relationships consequent on the rise of commercial capitalism, it was based on a more egalitarian exchange of views and opinions between equal members of a 'public'. These individuals were not, moreover, construed as subjects of an absolute monarch forever obedient to regal and divine prescription, but as fellow citizens of the polity, with the right to a say in their own collective welfare.

Those individuals who formed the bourgeois public sphere were not necessarily 'bourgeois' in either the juridical or the Marxist sense. The structures of the public sphere, as we shall see, were open essentially to all adjudged rational beings. The nobility and the clergy as well as the third estate were thus free to participate fully in the movement of mutual enlightening—though women tended to fare less well, as did members of what the *philosophe* d'Alembert

philosophes' scepticism as regards physic was spasmodic sympathy for medical charlatans and irregulars: cf. below, Ch. 7, Sect. F.

[97] *The Structural Transformation of the Public Sphere: An Enquiry into a Category of Bourgeois Society* (Cambridge, Mass., 1991). Published in German in 1961, available in French from 1978, even before its appearance in English this work was making a major impact among Anglo-American as well as French scholars on the character of the Enlightenment and its relationship to the French Revolution. For an account, plus an assessment of some of the early influence of the work, cf. C. Calhoun (ed.), *Habermas and the Public Sphere* (Cambridge, Mass., 1992), esp. the essay by K. M. Baker, 'Defining the Public Sphere in Eighteenth-Century France: Variations on a Theme by Habermas'; and D. Goodman, 'Public Sphere and Private Life: Toward a Synthesis of Current Historiographical Approaches to the Old Regime', *History and Theory*, 31 (1992), 1–20.

characterized as 'the blind and noisy multitude'.[98] The influence of a voice within the bourgeois public sphere depended not on an individual's place at court or his rank and status in the world of monarchical corporatism, but on the strength of its rational appeal to fellow private individuals and *concitoyens* (co-citizens). Yet though there were nobles and ecclesiastics within the movement, the overwhelming bulk of the participants in the public sphere were male members of the literate and propertied middle class, juridically situated within the third estate. These included most of the kinds of individuals who were contributing to France's economic growth: members of the burgeoning tertiary sector of the economy as well as the merchant or manufacturing fractions of the bourgeoisie. Indeed, 'professional' groupings—including numerous medical men, as we shall see—were among the most vocal and prominent participants.

In the seventeenth century the royal court had set aesthetic and moral standards of *bon ton* and, through royal academies established under its aegis, had bidden fair to set the tempo and parameters of intellectual life. This was now less and less true. The dynamo of intellectual and cultural change was now located in the relatively autonomous world of print, and in new organs of intellectual exchange and sociability linked to it. The importance of the book trade in this process cannot be underestimated: it constituted the most significant institutional scaffolding on which the public sphere was erected. Publishing was enjoying a golden age.[99] Capitalist development in the trade vastly increased the volume and rate of publication: the number of titles issued each year quadrupled between 1700 and the 1780s. Improvements in communications meant that books—and news—were distributed more widely, and travelled faster, and in much greater quantities than ever before. 'Exchange', sagely noted the Dijon *parlementaire*, the president des Brosses in 1765, 'takes place for words as for other commodities.'[100]

The enhanced volume of book-purchase was accompanied by major shifts in public taste. Religious publishing, as we shall see, underwent something of a crisis.[101] The big gainers at religion's expense were the novel, whose ascent was prodigious, and the catch-all category 'sciences and arts'—in which medicine took a solid place alongside history, geography, philosophy, travel, art, and

[98] For women, see J. Landes, *Women and the Public Sphere in the Age of the French Revolution* (Ithaca, NY, 1988), and the critique of this work in Goodman, 'Public Sphere and Private Life', 1–20.

[99] H. J. Martin and R. Chartier (eds.), *Histoire de l'édition française*, ii. *Le Livre triomphant, 1660–1830* (Paris, 1984) is a marvellous synthesis on the large amount of outstanding scholarship on the book trade over recent decades. See too, for the latter part of the century, R. Darnton and D. Roche (eds.), *Revolution in Print: The Press in France, 1775–1800* (Berkeley & Los Angeles, 1989).

[100] Cited in Roche, *France des Lumières*, 507.

[101] See below, Sect. E.

music. With Latin definitively in decline as the language of international scholarship, an often vulgarized science in the French language produced some of the period's non-fiction best sellers. The abbé Pluche's multi-volume *Spectacle de la Nature* (1732–48) went through some twenty editions down to 1770, and had an estimated 20,000 purchasers and 100,000 readers. Buffon's masterly and sumptuously illustrated thirty-eight-volume *Histoire naturelle* (1749–1804) was the coffee-table success of the Enlightenment, the most widely collected (one hesitates to say widely read) scientific work in the eighteenth century. Diderot's *Encyclopédie*—the bible of Enlightenment science—went into six editions, and sold over 25,000 sets. The new science of economics boosted by a public taste for physiocratic writings also registered some palpable hits: the older Mirabeau's *Théorie de l'impôt* (1760) saw eighteen editions, Necker's *Compte rendu au Roi* (1781) seventeen.[102]

There were other strains of publication more resistant to the onward march of reason and science. Religion still bulked large, for example, among the productions of the Bibliothèque bleue.[103] Though targeted at the lowest social audience within the realm of print, the 'aristocracy of peasant and small-town labour',[104] such works were also to be found in the libraries of the élite: Queen Marie-Antoinette possessed a copy of Christmas canticles from the series. Thoroughly impregnated with post-Tridentine values and the culture of the miraculous, this corpus seemed at first sight to owe more to Nostradamus than to Newton. Yet there was a detectable shift in its contents over the century, and the modish scientism of the *philosophes* made some impact even here. The library now published works containing more varied forms of practical knowledge—books of manners and guides to civility in particular flourished. The popular almanac too, whilst retaining its archaic flavour, also evolved into a more edifying and moralistic form. There was less prophesying and astrology within these handbooks too, and more history and pragmatic knowledge-cum-popular science.

The sheer volume of publication in a society increasingly characterized by circulation and exchange was now such that the reading requirements of the masses were expanding beyond the familiar reaches of the Bibliothèque bleue. The whole Enlightenment project was centred on openness and exchange and

[102] Martin and Chartier (eds.), *Histoire de l'édition*, 187, 211–12, 259, etc. See too Darnton, *Business of Enlightenment*.

[103] Though not among the total output of the printing presses, for numbers of new religious titles generally were falling. See below, Sect. E.

[104] L. Andries, *La Bibliothèque bleue au XVIIIe siècle: Une tradition éditoriale* (*Studies in Voltaire and the Eighteenth Century*, 270; Oxford, 1989), esp. 138. Cf. Roche, *France des Lumières*, 87 f., 116, etc.; and, in general, R. Chartier, *The Cultural Uses of Print in Early Modern France* (Princeton, 1987). For the Bibliothèque bleue, see too above, pp. 75–7.

though there was a great deal of social élitism among its adherents, the latter usually broadly espoused a commitment to the gradual enlightenment of the masses. Levels of literacy had, moreover, risen in a way which made the expanding print culture available to ever-larger numbers. Assisted by the growth of primary schooling to which the royal government made an important contribution, literacy rates shot up between the late seventeenth and the late eighteenth centuries, rising from 29 to 47 per cent for men and even more steeply—from 14 to 27 per cent—for women. These national averages obscured very great regional differences: a much more highly educated north and north-east contrasted with a more illiterate south and west where non-French languages and local patois often predominated; and levels of literacy were always far higher in towns than in rural areas, and among Protestants (or *Nouveaux Convertis* as they were called) than Catholics. In Paris, it may well be that the vast majority of Parisians were fully paid-up members of the world of print.[105] Post-mortem inventories reveal a growing attachment to the book: book-possession grew between 1700 and mid-century from 13 to 35 per cent for wage-earners, from 32 to 58 per cent for members of the world of the *robe*, and from 26 to 53 per cent for the old nobility. Personal libraries were not only bigger but also more diverse in their contents by the end of the century.[106]

The empire of print extended further than the reach of the book, moreover: a miscellany of ancillary and dependent forms—posters, pro-formas, songs, engravings, broadsheets, advertisements—provided an apprenticeship in literacy, in which the expansion of the postal services to cope with the increased volume of letter-writing also deserves honourable mention.[107] Particularly significant in this respect was the growth of the periodical press.[108] Over 1,500 periodicals lasting at least one year were published in the French language between 1600 and 14 July 1789: four-fifths of those date from the eighteenth century, especially from the period after 1750.[109] The main French news journal was the *Gazette*, founded by Richelieu's minion Théophraste Renaudot in 1631 and which until the end of the Ancien Régime, published all the news the

[105] F. Furet and J. Ozouf, *Reading and Writing: Literacy in France from Calvin to Jules Ferry*, Eng. trans. (Cambridge, 1982); and, for the educational background to literacy changes, R. Chartier *et al.*, *L'Éducation en France du XVIe au XVIIIe siècle* (Paris, 1976).

[106] R. Chartier, *The Cultural Origins of the French Revolution*, Eng. trans. (Durham, NC, 1991) 69; Roche, *People of Paris*, esp. ch. 7.

[107] Goodman, *Republic of Letters*, esp. ch. 4.

[108] J. Sgard (ed.), *Dictionnaire des journaux, 1600–1789* (2 vols.; Oxford, 1991). See too J. Popkin's contribution to Darnton and Roche (eds.), *Revolution in Print*; and J. R. Censer and J. D. Popkin (eds.), *Press and Politics in Pre-Revolutionary France* (Berkeley & Los Angeles, 1987).

[109] Sgard (ed.), *Dictionnaire des journaux*, ii. 1136–7. The breakdown of figures given there, based on 1,245 titles lasting one year, is as follows: 1600–99 = 19.0%; 1700–49 = 32.6%; 1750–89 = 48.4%.

government saw fit to print. As the eighteenth century wore on, however, a number of newspapers published outside France were distributed with the state's tacit (but retractable) permission—the *Gazette de Leyde* out of Leiden was the most famous example—and these came to supplement the French *Gazette*'s 'top-down' solemnity with a less partial record.[110] Such was the demand for news, moreover, that many periodicals nominally preoccupied with other business also came to offer necessarily coded versions of public affairs.[111] Political news was, however, only one form of the information which was generated and circulated by the periodical press: science (medical journals were a particularly successful form), art, theatre, music, and fashion all offered their sectional and particular versions of current vogues and news. They formed a network, moreover, which was not overpowered by Parisian tastes: one-third of titles were published by francophone presses outside France; 40 per cent originated in the French provinces. Collectively, they created a loosely democratic audience of readers, drawn from the middle classes and above, with a new and enlarged sense of public affairs.

Contemporaries were aware that the readers of this variegated and expanding production formed a new social and ideological force in French life. The terms 'opinion' or 'public opinion' came to be used to denote the sociological constituency which print variously knitted together. Whereas in the seventeenth and early eighteenth centuries the idea of opinion had denoted something plebeian, prejudiced, blindly passionate, it now carried with it connotations of impartiality and supra-factional rationality (though a distinction was sometimes retained with 'popular' opinion, which maintained a negative aura).[112] Jansenist barristers from the 1720s outlining the case against government religious repression in legal briefs widely circulated outside the legal profession were among the first to invoke the collective judgement of the 'public' as a kind of supreme tribunal in the justice of their case. The rhetorical strategy became a stock-in-trade of pamphleteering and populist politics after mid-century.[113]

The figuring of the public as a sort of contemporaneous posterity, a source of ultimate legitimacy which transcended state legality and authority and whose utility was to be assiduously served was encouraged by the activities of a number

[110] J. Popkin, *News and Politics in the Age of Revolution: Jean Luzac's 'Gazette de Leyde'* (Ithaca, NY, 1989).

[111] Cf. below, Ch. 12, Sect. F; and C. Jones, 'The Great Chain of Buying: Medical Advertisement, the Bourgeois Public Sphere and the Origins of the French Revolution', *American Historical Review*, 101 (1996), 13–40.

[112] Habermas, *Structural Transformation*, 89 ff.; K. Baker, 'Public Opinion as Political Invention', in id., *Inventing the French Revolution: Essays on French Political Culture in the Eighteenth Century* (Cambridge, 1990).

[113] D. A. Bell, *Lawyers and Citizens: The Making of a Political Elite in Old Régime France* (Oxford, 1994); see also below, Ch. 12.

of organisms which supplemented the world of print in embodying the public and in constructing, relaying, and amplifying opinion. At the level of the social élite, salons in the capital offered a location for cultural fusion of nobles and the upper bourgeoisie, and for the development of new approaches to social and political reform. The *gens de lettres* who dominated their proceedings regarded themselves as privileged members of a 'Republic of Letters' whose vocation included both the enlightening of public opinion and the means of its expression.[114]

Reading spaces which offered both access to print and propinquity to like-minded individuals for free and open exchange of views were also highly significant in this regard. By the 1780s a score of cities had public libraries, while monastic institutions and wealthy private individuals had also developed the practice of opening their own libraries to the genteel public.[115] The reading-room (*cabinet de lecture*) which sometimes developed in association with libraries, and which were more often independent enterprises, offered a popular location of middle-class sociability and discussion too. These sometimes metamorphosed into literary clubs and societies. At a more mundane level, coffee-houses—which often subscribed to newspapers and journals—also developed as archetypical sites of sociability and debate. They were less ribald, less disorderly, and less plebeian than the tavern or inn, or assorted gambling dens, brothels, and billiard-halls, whose role as relayers of news and opinion should not be underestimated.[116] The first coffee-house in Paris dated from 1672, and by 1723 they numbered 380 and they seemingly tripled or quadrupled this level by the eve of the Revolution.[117] Louis-Sébastien Mercier noted of their denizens, 'they hold academic session; they pass judgement on authors and plays, and they assess their standing and judgement ... The chatter endlessly revolves around the newspaper.'[118] After 1777 the *musée* (museum) developed in Paris by Pahin de La Blancherie provided a popular new model. Mixing scientific demonstrations and artistic representations with debate and polemic, the *musée* had as its aim, as its founder put it, 'to facilitate the communication of minds, opinions, talents, and research in all genres'. By 1789 they had many imitators, both in Paris and in provincial towns.[119]

[114] Goodman, *Republic of Letters,* provides the most up-to-date reading of the salons.

[115] Roche, *France des Lumières*, 182; Martin and Chartier (eds.), *Histoire de l'édition*, 411–12.

[116] T. E. Brennan, *Public Drinking and Popular Culture in Eighteenth-Century Paris* (Princeton, 1988) makes a good case along these lines, though we feel there was more cross-class sociability within these institutions than he portrays.

[117] Brennan suggests the following figures by 1789: 1,200 cafés, 2,000 wine-merchants, 655 beer-, brandy-, and cider-sellers. Ibid. 89 n. Cf. Roche, *France des Lumières*, 414.

[118] *Le Tableau de Paris* (12 vols., Amsterdam, 1782–8), i. 227–8.

[119] Goodman, *Republic of Letters*, ch. 6, offers an excellent and informed recent discussion (see p. 244 for the quotation). For a provincial analogue, see J. Coutura, 'La Musée de Bordeaux', *Dix-*

Equally open to new ideas and equally prone to equate their participants with enlightened public opinion were the Masonic lodges whose numbers burgeoned after mid-century.[120] The first French lodge had been founded in Paris in 1725; by the end of the Ancien Régime, there were over 1,000 lodges throughout France, whose 100,000 members made up perhaps as much as 5 per cent of all town-dwellers. The movement was saturated by arcane ritualistic ceremonies. Though these seemed merely to mimic the formalism and hierarchy of the royal court, in fact they transcended them, offering a class-free aura of sociability—the only internal hierarchy was by Masonic rather than social rank. This formula had a particular appeal for the literate and business classes, especially those whose work made them itinerant, for lodges often served as reception-committees for travelling 'brothers'.[121]

In theory, the clandestinity of Freemasonic ritual would appear to militate against the emphasis on openness and transparency which were among the strongest values of the public sphere. In fact, Masonic lodges were a kind of open secret: their rites and 'secrets' were widely known; some lodges even advertised their meetings in local newspapers; and police spies were often among the most assiduous attenders at masonic meetings.[122] Furthermore, the existence of state censorship and police regulation justified an at least partial resort to clandestinity. Voluntary associations existed at the pleasure of government, which might be instantly withdrawn: the right to meet freely was to be a victory for 1789, so it is hardly surprising that the institutions of the public sphere sometimes took the form of enclaves and semi-hidden spaces.

The world of print which lay at the heart of the public sphere was, moreover, particularly vulnerable to state interference. Government in the 1760s and 1770s enjoyed a reputation for growing liberalization in the implementation of censorship laws; yet more individuals were incarcerated in the Bastille towards the end of the Ancien Régime for publishing offences than at any other time.[123] The number of state censors grew at a faster rate than the upward curve of book-production: fewer than a dozen in 1660, thirty by the early eighteenth century,

Huitième siècle, 19 (1987), 149–64. We leave out of our necessarily cursory outline of the institutions of the growing public sphere organisms for the refinement of artistic taste (such as the Paris Salon: see the highly relevant discussion of this in T. Crow, *Painters and Public Life in Eighteenth-Century Paris* (New Haven, 1985)) and institutions for disseminating popular science (botanical courses, anatomical discussions, etc.).

[120] For Masonry, see esp. R. Halévi, *Les Loges maçonniques dans la France d'Ancien Régime: Aux origines de la sociabilité démocratique* (Paris, 1984); and M. Jacob, *Living the Enlightenment: Freemasonry and Politics in Eighteenth-Century Europe* (Oxford, 1991). Cf. Roche, *France des Lumières*, 155–6, 392.

[121] Cf. R. Pomeau, *L'Europe des Lumières: Cosmopolitisme et unité européenne au XVIIIe siècle* (Paris, 1966), esp. 281 ff.

[122] Goodman, *Republic of Letters*, 256 n.

[123] M. Cottret, *La Bastille à prendre* (Paris, 1986) for the statistics.

they numbered no fewer than 178 on the eve of the Revolution.[124] The corporative structure of the Parisian printing trades also acted as a brake on free and open production and distribution.[125] The prime targets for police attention were pornography and radicalism, but these could on occasion be detected in even the most apparently neutral texts.

Even that great monument of Enlightenment science, Buffon's *Histoire naturelle*, had its problems with the censors, for much of the contents of the early volumes—which covered the origins of the earth, for example—was situated on the crossroads between physics and theology.[126] The wily author had deliberately published through the Imprimerie du Roi to avoid having to submit his manuscript for advance censorship by the theology censors at the Sorbonne (and indeed his fellow-members of the Academy of Sciences). Even so, he fell foul of the Sorbonne and was compelled to agree to clarification of fourteen theologically objectionable points in an apologia he later sported almost like a duelling scar as an imprimatur in the preliminary pages of every subsequent volume. This did not prevent Jansenists from attacking the 'carcass of the Sorbonne' for its 'Jesuitical' leniency, and it may help explain why Buffon did not feel comfortable with publishing his own estimates of the longevity of the earth, which clashed glaringly with theological opinion.[127]

The continuing role of the royal censor in intellectual life was a reminder of the persistent vitality, even in an era of the burgeoning of the bourgeois public sphere, of representations of the public more consonant with monarchical claims to absolute power. At the zenith of the ideology of absolute monarchy under Louis XIV, the monarch's person had bidden fair to invade all public space—an aspiration neatly symbolized in the doubtless apocryphal Louis-Quatorzian tag, 'L'état, c'est moi.' The king's sacred body was emblematic of the physical unity, economy, and well-being of the body social. Its situation at the apex of the social and political pyramid staked the ruler's claims to sovereignty and provided the archetype of legitimate authority. The elaborately ceremonial theatrical rituals of royalty made great play of the king's concern for the welfare of his peoples: the ceremony of touching for the king's evil both emblematized this concern and highlighted the place of physical health and

[124] Figures from Martin and Chartier (eds.), *Histoire de l'édition*, 82. The sixfold rise in numbers over the 18th cent. contrasts with the tripling or quadrupling of book production over the same period.

[125] See C. Hesse, *Publishing and Cultural Politics in Revolutionary Paris, 1789–1810* (Berkeley & Los Angeles, 1991), esp. chs. 1, 2.

[126] This story is well told in J. Roger, *Buffon* (Paris, 1989), see esp. 115–17, 151, 252 ff.

[127] His text said 75,000 years rather than the 4,000 usually ascribed to the earth by the theologians. However, his manuscripts show his conviction that the true figure was over 750,000 years. Roger, *Buffon*, 540–1.

spiritual purity within it.[128] The body of the king, whence these curing miracles flowed, was thus touchstone and guarantee of order within the kingdom as a whole; in a related set of metaphors, the monarch lorded it over the nation in much the same way as the biological head ruled the body, or the paterfamilias ruled his family. Disruptions at one level—ill health in the body of the king for example—implied disorder at all levels within the body social.

Under a rather more mechanical set of images with which this organic view competed, the body social was also still represented as comprising a myriad of hierarchically ordered corporative bodies, again with the monarch at their apex. This relatively static, and strictly hierarchical, view of society was sometimes represented in terms of an interlinked chain of influence and authority which formed part of the 'great chain of being' linking the lowest living forms to the highest (namely God). In the chain of connection which characterized the *Ständestaat*, the lowliest public body was connected ultimately with the highest; that is, the king. In a remonstrance presented to Louis XVI by the Paris Cour des Aides as late as 1776, avocat-général Antoine-Louis Séguier recapitulated this view:

> The clergy, the nobility, the sovereign courts, the subaltern courts, the officers attached to these courts, the universities, the academies, the companies of finance, the chartered companies—in every part there are bodies existing which can be regarded as links in a great chain, the first link of which is in the hands of Your Majesty as head and sovereign administrator of everything which composes the body of the nation. The very idea of destroying this chain should be appalling.[129]

As we have seen, public identity in early modern France had been constructed largely through such bodies, which conducted their lives through the rhythm of a rich, pageant-like corporative idiom with its distinctive rituals, prescriptive texts, litigious squabbles, and so on.

In a development pregnant with ominous meaning for absolute monarchy, these systems of representation which had been constructed since the Middle Ages and which centred round the legitimate authority of the monarch began to show signs of wear and tear in the eighteenth century under the impact of the burgeoning world of print and the bourgeois public sphere. The king's body started to lose its sacral aura. Louis XIV's death in 1715 following a generation of gruelling and damaging wars was greeted with widespread public relief, and while Louis XV initially won popular support, his salacious private life scandalized

[128] See above, pp. 73 ff. For the political metaphor of the body at the end of the century, see A. de Baecque, *Le Corps de l'histoire: Métaphores et politique (1770–1800)* (Paris, 1993).

[129] *Remontrances du Parlement de Paris au XVIIIe siècle* (3 vols., Paris, 1898), ed. J. Flammermont, iii. 309, 321. For the Great Chain of Being, see the classic exposition in A. O. Lovejoy, *The Great Chain of Being* (Cambridge, Mass., 1936). See also above, Ch. 1.

many.[130] Popular riots in Paris in 1750 caused by the alleged kidnapping of street children revealed a widespread rumour that the blood of the children was being utilized to treat the leprous skin condition of the monarch: with innocents at risk, the king had metamorphosed into Herod, and his body figured not as the core principle of communal health but as a source of disease in the body politic.[131] Whereas Louis XIV had at least maintained a high profile at his palace in Versailles, moreover, his successor's lifestyle required a more intimate setting. A steady retreat away from public theatricality at court formed part of a more general deritualization of monarchy evident in other ways. Louis XV rarely ventured outside the round of his palaces in the Versailles region after the 1740s and refused to touch for the king's evil on a number of public occasions when it was expected of him. Indeed, the shift in the touching formula from 'Le Roi le touche, Dieu te guérit' ('The King touches you, God heals you') to 'Dieu te guérisse, le Roi te touche' ('May God cure you, the King touches you') was eloquent in its way: word-order changes and the emergence of the subjunctive suggest that even the king was losing faith in the sacredness of his own body.[132]

The retreat from absolutist ceremonial and from an earlier royal itineracy covering much of the nation highlighted royal immobility and closure in what was, as we have seen, an increasingly mobile and open society. In this respect Louis XVI from 1774 failed to reverse the trend. He was virtually never seen outside the Île de France. After a brief honeymoon period, moreover, he came to be the butt of the humour of the satirist and the pornographer. His problems with the consummation of his marriage to the unpopular (and allegedly lubricious) Marie-Antoinette were read—long before Freud—as a failure to keep his sceptre dutifully erect.[133] Though motivated not by debauch but rather—as if captivated by bourgeois domestic values—by the wish for a happy home life, he too preferred less public, more private residences for his daily routines. The royal court, which had at one stage seemed a means of liaison with his subjects, came to be increasingly criticized as a noxious element. Where once it had been

[130] Good discussions of desacralization in R. Chartier, *Cultural Origins*, and Roche, *France des Lumières*. See also J. Merrick, *The Desacralization of the French Monarchy in the Eighteenth Century* (Baton Rouge, La., 1990).

[131] A. Farge and J. Revel, *The Vanishing Children of Paris: Rumor and Politics before the French Revolution* (Cambridge, Mass., 1991). For further exx. of popular discontent with Louis XV, see the police reports discussed in D. Van Kley, *The Damiens Affair and the Unravelling of the Ancien Régime, 1750–1770* (Princeton, 1984), esp. 246 ff.

[132] Roche, *France des Lumières*, 239; J. de Viguerie, 'Le Roi, le "public" et l'exemple de Louis XV', *Revue historique*, 278 (1987), 23–34; M. Bloch, *The Royal Touch: Sacred Monarchy and Scrofula in England and France*, Eng. trans. (London, 1973), 225, 409 n. 49.

[133] See J. Cuno (ed.), *French Caricature and the French Revolution, 1789–1799* (Berkeley & Los Angeles, 1988); de Baecque, *Corps de l'histoire*, ch. 1; and L. Hunt, *The Family Romance of the French Revolution* (Berkeley & Los Angeles, 1992), esp. ch. 2.

the heart of the body social, it could now be figured as a parasite on its extremities, or as a source of obstruction shutting off the monarch from knowledge of and interest in popular welfare.

Royal neglect of forms of publicity and ceremonial theatricality thus contributed to the decay of ancient systems of representation which had highlighted the king as the highest source of earthly authority within French society. The process of decay was protracted, uneven, and incomplete, certainly by 1789. The *cahiers de doléances* (books of grievances) composed in that year by an extremely broad cross-section of the French people in the run-up to the meeting of the Estates General were as one in professing fidelity and affection for their monarch: there were as yet few signs of the overt anti-royalism which would lead to the overthrow and execution of Louis XVI just a few years later.[134] However, the 1789 episode was symptomatic. The French people expressed their gratitude for this unparalleled opportunity of expressing their views, and the assumption was implicit that the events of 1789 would presage new forms of authority. Under these, representation would be based not on repetition of monarchical rituals within a courtly setting, but rather on principles of election and delegation of authority to popular representatives in a national assembly, or parliament.

This clash of meanings of the term 'representation' highlighted competing sources of legitimacy which had developed over the course of the century within the shadow of the Enlightenment. The pluralistic movement of ideas vanguarded by the *philosophes* subjected prescriptive forms of authority to a critique grounded in empirical reason, and their move to make human happiness the objective of political action designated utility as a yardstick of action, and led to the championing of the public rather than the court as the legitimate source of authority.[135] The new model of social representation which the Enlightenment began outlining was consubstantial with, and drew metaphorical sustenance from, the social and economic transformation taking place which we have evoked. The space which this booming era of commercial capitalism had opened up for trade extended to the exchange of information and ideas as well as more prosaic goods and services. Contestation against the fixity, immobilism, and hierarchy which seemed to flow from ceremonial demonstrations of monarchical authority was accompanied by a strong valorization of 'commerce', a term which was glossed as economic transaction but also as intellectual exchange and the kind of urbane sociability on which a civilized society should be based.[136]

[134] For the *cahiers*, see esp. Chartier, *Cultural Origins*, 111–13.

[135] For the ideas of the Enlightenment, see above, Sect. C.

[136] This variety of meanings was already apparent in the late 17th cent.: see A. Furetière, *Dictionnaire universel* (3 vols.; The Hague, 1690; facsimile repr., Paris, 1978), i, art. 'commerce'.

To present the monarch and his government as being viewed as a perennial and unremitting block on intellectual change or as an unchanging vestige of an earlier age would, however, be a gross distortion of the monarchy's place in the age of Enlightenment. Indeed, one of the most striking features of the last decades of the Ancien Régime monarchy was the spectacle of governments endeavouring to adapt to the changed cultural landscape and to square monarchical prerogatives with the growing prestige of empirical reason and with the expanding exigencies of public opinion. Even in the 1789 *cahiers*, monarchical tones were heard which pointed to the development of a new version of royalty which equated absolute government with disinterested rationality: the king represented the potential triumph of socially useful reason.

Throughout the century, for example, successive governments practised a politics of communication fully in tune with the *Zeitgeist*: ports were improved; roads and bridges constructed; canals and rivers were made navigable; forced labour service on the roads (the *corvée*) was introduced by decree in 1737 so as to get things done; and the highly professional corps of state engineers, notably those attached to the Ponts et Chaussées department, provided high-quality expertise in this domain. If, as Daniel Roche has argued, the Enlightenment represented 'une civilisation de la route', then that civilization travelled on state constructions and kept in touch through the speedy efficiency of the royal mail.[137]

The policies of educational diversity which successive governments pursued also attested to a new openness on the part of government to the utility and applications of science. In the reign of Louis XIV, the state had shown a novel interest in ensuring the quality of the education given in the municipal colleges and universities, but had largely accepted the shape of the curriculum handed down from the later Middle Ages.[138] In the eighteenth century, however, the traditional structure of higher education came under attack from the new opinion formers ensconced within the public sphere. Educational reformers, *parlementaires* as well as *philosophes*, believed that education should be pragmatic and utilitarian. They rejected the emphasis in the college curriculum on teaching of Latin and Greek as a waste of time; accused the higher faculties of giving courses in law, theology, and medicine which were too abstract and theoretical; and insisted on a greater place being accorded the physical sciences and experi-

[137] *France des Lumières*, 38 ff.

[138] The crown was keen to eradicate the corruption surrounding the granting of degrees in some faculties. For the ease with which certain medical faculties awarded degrees, see above, Ch. 3, Sect. C. Louis XIV's attempt in 1707 to standardize the curriculum and process of examination in medicine is discussed below, Ch. 8, Sect. B. Medical degrees were still given *à la hâte* in the 18th cent.: cf. the experience of physician-*philosophe* La Mettrie recounted in [Julien Offray de La Mettrie], *Ouvrage de Penelope, ou Machiavel en médecine* (2 vols., Berlin, 1748–50).

ential learning. According to Diderot, the existing curriculum had 'no other objective than to make priests and monks, poets and orators ... We need to substitute for the study of words the study of things.'[139] The crown's response was not to reform the colleges but to enlarge the field of higher education.[140] Two existing state-endowed institutions—the Collège Royal (later the Collège de France) and the Jardin du Roi—were transformed in the second half of the eighteenth century into scientific power-houses: indeed the latter, under Buffon's stewardship, became one of the high spots of European science. At the same time, surgical education was revolutionized by the creation of separate surgical colleges all over France; veterinary schools were established at Alfort (just outside Paris) and Lyons; while training in engineering was institutionalized by the foundation of the government department of the Ponts et Chaussées and also from 1748 the École de génie at Mezières and from 1778, the École des Mines.[141]

In these ways, the crown—especially in the reign of Louis XVI—helped display its credentials as a monarchy in tune with the times by ensuring that the work of contemporary experimental philosophy was properly promoted in the classroom. The Bourbon leopard could not, however, totally change its spots: the crown wished to police the new knowledge as well as to facilitate its dissemination. The extension of the institutional form of the academy showed the continuing royal predilection for establishing watchdogs to control learning and fix public taste: alongside the Académie française and the Academy of Sciences now stood academies for painting and sculpture (1648), inscriptions and belles-lettres (1663), opera (1669), architecture (1671), a list to which was added during the eighteenth century academies for surgery (1731), the navy (1752), and agriculture (1761). State-backed institutions with many of the trappings of

[139] Cited in B. Maitte, 'L'Enseignement des sciences', *Études sur le XVIIIe siècle*, hors série 7 (1989), 45. See too *Encyclopédie*, iii (1753), 634 ff. (art. 'Collège', by d'Alembert) and ibid. vi (1756), 86 ff. (arts. 'Étude', 'Études'). Diderot's fullest educational statement was his 'Plan d'une université', in id., *Œuvres complètes*, ed. J. Assézat (20 vols., Paris, 1875–7), iii. 410 ff. In this work, Diderot was notably less hostile to the curriculum of the medical faculty than the other two higher faculties. For a good account of the educational reform movement among parlementaires, see D. Julia, 'Une réforme impossible: Le Changement de cursus dans la France du XVIIIe siècle', *Actes de la Recherche en sciences sociales*, 39 (1981), 53–76.

[140] A great opportunity was lost with the expulsion of the Jesuits from France in 1762, for the Jesuits controlled a hundred *collèges de plein exercice* and several theology faculties. The lack of state interest in reforming the colleges and universities did not, however, mean that the curriculum ossified. The new science made important inroads in the philosophy course taught in the *collèges de plein exercice*: see Brockliss, *Higher Education*, ch. 7. The curriculum of the medical faculty also underwent considerable development, while an increase in a number of private facilities allowed medical students to gain practical experience: see below, Ch. 7, *passim*, and Ch. 9, Sect. C.

[141] For state support for educational diversity, see esp. R. Taton (ed.), *Enseignement et diffusion des sciences au XVIIIe siècle* (1964; repr. Paris, 1986), esp. the essays by Laissus, Taton, Hahn, and Torlais; and C. C. Gillispie, *Science and Polity in France at the End of the Old Régime* (Princeton, 1980), *passim*. For the new surgical colleges and veterinary schools, see below, Ch. 9, Sect. C.

academies were also created for pharmacy (1777) and medicine (1778).[142] These bodies were increasingly flanked moreover by academies based in the provinces which also caught the prevailing mood of concern with measures of social amelioration and public utility.[143] Over thirty in number, provincial academies were usually modelled on the royal archetype, receiving royal letters patent, and provided a steady flow of information and publication on scientific and medical matters. Rooted in the major provincial capitals, they were largely composed of local notables of every description, including large numbers from the professions. Like the national academies, they tended to be somewhat stuffy and formal in their proceedings: characteristically, even though membership was not supposed to recognize status differences from the outside world, the meritocratic ideal was indeed an ideal, and squabbles over precedence studded their history. Nevertheless, though they were devised as top-down institutions (the local intendant often animated their activities), many of the provincial academies underwent something of a sea change over the eighteenth century. Rather than acting merely as agencies for relaying the authority of the national academies in conferring epistemological legitimacy and setting aesthetic standards, they came to develop a strong autonomy and took pride in reflecting the interests and concerns of local society. With one foot in the formal structures of the state, by the last decades of the Ancien Régime they had the other firmly planted in the bourgeois public sphere. There was a heavy overlap in fact between membership of academies and other organs of sociability and opinion such as the Masonic lodges. 'I see that our academy is changing into a Freemasonic society', the *philosophe* Montesquieu playfully remarked in a letter to a friend about the Bordeaux Academy as early as 1749, 'except that we don't sing or drink; but we build.'[144]

In this work of enlightened construction conducted by the organs of Enlightenment sociability and opinion, medical men were numerous. With lawyers and state officials in particular—but also, more sporadically, with other professionals (non-titled military men and ecclesiastics, teachers, engineers, etc.) who also benefited from expanding demand for goods and services—they formed the heart of the bourgeois public sphere.[145] Over 10 per cent of provincial academicians were medical men, and they composed nearly one-third of the members

[142] For the Academy of Surgery and the Royal Society of Medicine, see below Ch. 9, Sect. C, and Ch. 12, Sects. D and E.

[143] D. Roche, *Le Siècle des Lumières en province: Académies et académiciens provinciaux, 1680–1789* (2 vols.; Paris, 1978).

[144] Cited ibid. i. 61. Local agricultural societies founded in the provinces from the 1750s described much the same trajectory: ibid. 283 ff.

[145] On the critical role of the professions in mediating between the world of politics and economics, see C. Jones, 'Bourgeois Revolution Revivified: 1789 and Social Change', in C. Lucas (ed.), *Rewriting the French Revolution* (Oxford, 1991).

drawn from the third estate. This prominence was, in fact, fairly typical of medical involvement in the institutions and organs of the bourgeois public sphere (see Table 6*b*). Though their representation in Masonic lodges appears surprisingly limited, in most other domains—from authorship (including involvement in prestige projects such as the *Encyclopédie*) through membership of academies and salons, down to coffee-houses—they were ubiquitously to the fore.

TABLE 6*b*. *The sociology of the bourgeois public sphere*

	Clergy	Nobility	Third Estate		
			Total	medical men	Observations
Authors active[a]					
in 1769	24	12	59	16	5% unidentified
in 1784	20	14	59	17	7% unidentified
Encyclopédie:					
collaborators[b]	6.6	9.6	83.8	16.3	
subscribers[c]	15	53	69	4	case study: subscribers to Quarto edn., Besançon
Salons	many	many	present		only élite third estate members
Provincial academies[d]	22.1	39.9	37.7	10.8	Mainly élite third estate members
Masonic lodges[d]					
Paris	3.9	22.5	73.6	?	
provinces	3.9	14.8	80.2	*c.*6	
Coffee houses	very few	some	many		esp. middling groupings

Sources:

[a] R. Darnton, 'The Facts of Literary Life in Eighteenth-Century France', in K. M. Baker (ed.), *The Political Culture of the Old Régime* (Oxford, 1987), 274.

[b] J. Proust, *Diderot et l'Encyclopédie* (Paris, 1962), 21 ff.

[c] R. Darnton, *The Business of Enlightenment: A Publishing History of the 'Encyclopédie', 1775–1800* (Cambridge, Mass., 1979), 291.

[d] D. Roche, *Le Siècle des lumières en province: Académies et académiciens provinciaux, 1680–1789* (2 vols.; Paris, 1978), i. 267; ii. 383, 406 f., 419

The bourgeois public sphere, like the medical world, was a largely male domain. Levels of female literacy were actually growing faster than those of males throughout the eighteenth century, and a great many Enlightenment authors targeted the growing pool of female readers. There were women writers

too—perhaps, though, only under 5 per cent of the 'Republic of Letters'—and women journalists.[146] Most literary salons were also presided over by a woman; figures such as Madame de Geoffrin, Madame de Lespinasse, and Madame Necker (the wife of Louis XVI's finance minister) provided a critical function in mobilizing support for *philosophe* campaigns and developing enlightened sociability.[147] As the Enlightenment developed, however, the key organisms of the bourgeois public sphere found less and less space for women. The latter's involvement in Masonic lodges, *musées*, and literary societies whose numbers were mushrooming in the last decades of the Ancien Régime was minimal, marginal, or non-existent. This dovetailed with changes in ideas about the family. From the 1750s the idiosyncratic *philosophe* Jean Jacques Rousseau had led the charge, specifically indicting the institution in which women played the largest part: the salon. Here, he held, women 'do not know anything, although they judge everything'.[148] Rousseau's rude republicanism had little room for female involvement. He preferred his women in the bosom of the family; he popularized the practice of bourgeois mothers breast-feeding their children, providing a stimulating educational environment for their children and nurturing their menfolk.

Among the men who quasi-monopolized both the government's academic agencies and the organisms of the bourgeois public sphere, the position of medical men was all the more pivotal in that government support for science extended particularly forcefully to the field of public health. As we have suggested, the defeat of the Marseilles plague of 1720 accrued to the repute of physicians, but it was government which had cleared the terrain for them to act. This episode was symptomatic of a growing concern over the course of the eighteenth century for state-backed preventive measures in public health. There was nothing new, of course, about the idea of prevention in medicine: the Galeno-Hippocratic corpus was grounded in the need for rules of conduct for an individual to maintain him or herself in good health. Nor was the assumption

[146] See the statistics on authorship provided by Darnton, 'Facts of Literary Life', 274. For journalism, see esp. N. R. Gelbart, *Feminine and Opposition Journalism in Old Regime France: Le Journal des Dames* (Berkeley & Los Angeles, 1987).

[147] Goodman, *Republic of Letters*, is a fine analysis of the role of women in the salons and their subsequent exclusion from Masonic lodges, *musées*, etc. However, we feel that she overestimates the active role of the women in salons: the latter was less of an exception to the maleness of the public sphere than she assumes.

[148] Cited in Goodman, *Republic of Letters*, 54. For Rousseau and the emerging cult of domesticity, see Landes, *Women and the Public Sphere*; C. Blum, *Rousseau and the Republic of Virtue: The Language of Politics in the French Revolution* (Ithaca, NY, 1986); and M. Jacobus, 'Incorruptible Milk: Breast-Feeding and the French Revolution', in S. E. Melzer and L. W. Rabine (eds.), *Rebel Daughters: Women and the French Revolution* (Oxford, 1992). See too R. Darnton, 'Readers Respond to Rousseau' in id., *The Great Cat Massacre and Other Episodes in French Cultural History* (New York, 1984).

of public health as a legitimate objective of government novel: monarchs had been legislating on health hazards since the Middle Ages.[149] What was, however, new in the adoption of public health on the state agenda was, first, the so-called depopulation thesis—the widely (and utterly erroneous) view that population levels were in worrisome decline—which acted as a powerful intellectual incentive to engagement in such measures; second, a greater emphasis on prevention applied to collectivities rather than individuals—the aim was to shift the focus from the individual to society as a whole; and third, the greater effectiveness of the state's organs of administration which allowed better delivery of public health objectives.[150]

Government response to the perceived problem of ensuring a steady and expanding flow of productive individuals in what were generally regarded as highly impropitious demographic circumstances was varied and often rather imaginative. The streamlining of the central bureaucracy and the development of an effective local administration through the tried and tested system of intendants allowed the state a better flow of information and a wider range of policy options—in public health as in other areas of state concern.[151] Often advised by the galaxy of talents in its Academy of Sciences, the state took a leading role in the compilation of censuses, the enacting of programmes of social enquiry and observation, the devising of statistical tests, and experimental techniques and exercises—the range of forms of knowledge and intervention increasingly theorized as administrative science or, in current parlance, *police*.[152] Improvement in the social environment seemed increasingly to be viewed as a precondition of the better administration of medicine, and the key to demographic and economic regeneration. This concern with environmental engineering fed into, as we shall see, a 'medicine of the environment' which was becoming increasingly popular since the work of Englishman Thomas Sydenham (1624–89) in the late seventeenth century, and the revival of Hippocratic ideas which he helped to promote.[153] The keynote of the campaign was an attack on stench in all its forms: bad smells, in the miasmatic theory still current, were viewed as a sure sign of the presence of disease. Drainage of marshes and water-logged land, better water supply and the imposition of cleanliness on urban sites, provision of ventilation in crowded and enclosed spaces, and especially from the 1740s and 1750s a

[149] Cf. A. Franklin, *La Vie privée d'autrefois. L'Hygiène* (Paris, 1890), 4 ff. See also above, Ch. 1, Sects. B and C.

[150] For a fuller discussion, see below, Ch. 12.

[151] For the 18th-cent. government as bureaucratic system, see esp. A. Guéry and R. Descimon, 'Un état des temps modernes?', in A. Burguière and J. Revel (eds.), *Histoire de France: L'État et les pouvoirs* (Paris, 1989), esp. 264 ff.; and Roche, *France des Lumières*, 198 ff.

[152] See below, Ch. 12, Sect. C.

[153] The field is expertly surveyed in J. C. Riley, *The Eighteenth-Century Campaign to Avoid Disease* (London, 1987).

movement to shift cemeteries from town-centre sites to the outskirts of the city were the four main lines along which developments proceeded. The armed forces (over which the central government had unmediated control) and the city of Paris (regulated by the state's appointee, the *lieutenant-général de police*) provided laboratories for the implementation and trial of the new environmental technologies.

After mid-century there were many close to, and increasingly within, government who held that if the state removed the focus of its mode of operation onto a more scientific plane and centred its activities on public welfare, it could become the primary agent of a rationalization and societal amelioration which would satisfy the *philosophes* and sustain the bourgeois public sphere. The tenure of Bertin as principal minister from 1759 to 1763 in particular proved a seedbed for great bureaucratic reformers imbued with rationalist enthusiasm and humanitarian mission.[154] Bertin's decision in 1762 to permit rural industry to operate outside the corporative guild system of the towns showed characteristic daring. Some of Bertin's protégés (Malesherbes, Trudaine, Trudaine de Montigny, etc.), invariably touched by physiocratic intellectual currents, spent most of their careers as back-room boys in government administration. Turgot, however, was destined for greater things. A contributor to the *Encyclopédie* and in the 1760s enlightened and reforming intendant in the backward Limousin, this stalwart of physiocracy was in 1774 selected by the young new king, Louis XVI, as his principal minister.

The Turgot ministry constituted probably the most striking example of the government attempting to ride the wave of Enlightenment intellectual movements and practical rationality. Turgot brought forward a programme of reforms—freedom of trade in grain, abolition of the guilds, improvements in posts and communications—which represented, in his own words, 'one of the greatest steps that is to be taken ... towards the regeneration of the realm'.[155] It aimed at nothing less than the equation of government with Enlightenment rationalism. Yet whilst Turgot might vaunt his reforms as characteristic of Enlightened Absolutism, his opponents saw in them only ministerial despotism, and an onslaught on the corporative world in general, which presaged the end of the Great Chain of Being in which they were comfortably ensconced. It was to be his opponents, marshalled by the Parlement of Paris, who prevailed.

Turgot's dismissal in 1776 was far from the 'last call' for enlightened reform

[154] For Bertin and his influence, see Gillispie, *Science and Polity*, chs. 1 and 2.

[155] Cited in S. L. Kaplan, 'Social Classification and Representation in the Corporate World of Eighteenth-Century France: Turgot's "Carnival" ', in id. and C. J. Koepp (eds.), *Work in France: Representations, Meanings, Organization and Practice* (Ithaca, NY, 1986), 179. For Turgot and the project of the state as reason, we are drawing on the approaches of K. Baker, notably in his *Inventing the French Revolution*.

in the absolute monarchy: both Swiss financier Jacques Necker (from 1777 to 1781) and archbishop of Toulouse Loménie de Brienne (in 1787–8) were to prove distinguished reforming ministers in their different ways. Yet the demise of the Turgot ministry had the value of a parable: in particular, it demonstrated the difficulties of an absolute monarch hoping to digest the rationalist critique of existing institutions embodied in the bourgeois public sphere and to reconfigure itself as a pure and transparent agent of enlightened meliorism. The role of court faction in Turgot's downfall was highly symptomatic: were the monarchy to rationalize, it would have to start in the king's entourage. Similarly, the vigorous response from the corporative world, orchestrated by the Paris Parlement, highlighted the continuing vitality of a more archaic version of public identity. For all the commitment of many of the king's servants to reform, absolutism had seemingly failed to change its spots. The freedom and mobility characteristic of the Enlightenment tended to get caught in the thickets of court intrigue and *parlementaire*-constitutional legalism. Though the state liked freedom, moreover, it preferred that freedom to be regulated and under surveillance. Trade could be free: but not free in a way which endangered notions of *police*. Movement too could be free in theory: but the state's mounted police force, the *maréchaussée*, kept a brutal eye on vagabonds, its police commissaries regulated prostitutes, and state control over itinerant workers was thorough and intrusive. Most characteristic of all, the problems and the censorship of the book-trade highlighted what was at stake in competing notions of freedom. The cordon sanitaire might have worked in Marseilles against the plague. Yet a cordon-sanitaire approach to books and ideas, which aimed to keep 'dangerous' literature out of the kingdom and to restrict what the king's subjects read would always appear paternalistic at best, repressive and despotic at worst. Government was thus by the 1780s getting the worst of both worlds. Increasingly criticized from within the bourgeois public sphere for its lack of response to what were perceived as abuses within the body politic, it also attracted criticism from the elements within the state which were anxious about its flirtation with new forms of identity and power.

The state of the medical world constituted an excellent example of how pressured the existing corporative system on which absolutism had been based was looking as a result of the processes of reformulation and contestation of established forms of authority in the last years of the Ancien Régime. As we shall see, the authority claims of the corporative institution which stood at the apex of the medical world, namely the Paris Medical Faculty, were increasingly disputed. The burgeoning world of print subverted the prestige of the professorial *verbum* on one hand; on the other, the state, despite a lack of steady commitment to reform, sporadically raised hopes for change, and backed new teaching and research institutions. At the same time, the changing structure of the economy

was making many practitioners more sensitive to reform agendas which were less state-orientated and more attuned to the autonomous strains within the bourgeois public sphere. Physicians were also increasingly worried about the way in which the growth of the market and the new interest in morbidity had encouraged interlopers from the medical penumbra to muscle in on their territory. The shift in views as regards medical authority was not confined to the medical and administrative worlds: patients too had their own agendas, and these showed increasing signs of change.

E. The Transformation of Mentalités *and the Triumph of Life*

Major changes in the conventional protocols associated with dying as a good Catholic in the last decades of the Ancien Régime demonstrated that a profound change was taking place in the most basic preconceptions about human existence among the bulk of the population. The eighteenth century may have witnessed an age of enlightenment led by the *philosophes*: it also experienced socio-cultural transformation among the population at large. This process encompassed changes in attitudes towards not only death but also life.

Since the Council of Trent, as we have seen,[156] the death-bed had been vaunted as a last theatre of Christian virtues. Under the precepts of baroque piety, the dying person suffered pain with resignation, encouraged reconciliation, performed spiritual exercises, and made of the last will and testament a passport into purgatory. The will would contain a long religious preamble invoking numerous saints, stipulating masses for the soul of the deceased, electing a place of burial, making numerous religious and charitable benefactions, and orchestrating the funeral as a visual sermon of orthodoxy. These protocols were increasingly formalized in notaries' handbooks and in sermons, pamphlets, and books which taught the edifying skills of *bien mourir*: how to die well.

Over the course of the eighteenth century these arts of the 'good death', keystone of the Tridentine project of Christianization, became the exception where once they had been the rule.[157] Although there were some places which bucked the trend—eastern France and Savoy, for example—the general drift was away from this model of comportment. In Provence, more than 80 per cent of testators were writing the traditional kind of will until about mid-century; by the 1780s only half were. In Paris, the shift took place a decade or two earlier and was

[156] See above, Ch. 1, Sect. D.

[157] See references given above, Ch. 1 n. 99. The decline of baroque piety is mapped out esp. helpfully in M. Vovelle, *Piété baroque et déchristianisation en Provence au XVIIIe siècle: Les Attitudes devant la mort d'après les clauses de testaments* (Paris, 1973). See too his 'Le Tournant des mentalités en France, 1750–1789: Une "sensibilité" pré-révolutionnaire', *Social History*, 2 (1977), 605–29.

even more extensive. In Grenoble, the comparable figures for individuals making pious bequests, most notably for masses for the repose of their soul, were 74 per cent in the 1740s and 53 per cent in the 1780s. In Montpellier the fall was from 61.7 per cent in the 1740s to 26 per cent in the 1780s, in Rouen from 54 per cent in 1700 to 16 per cent by the 1780s.[158] The other elements in the testament showed a similar erosion: the saints lost their charms, as invocation was often restricted to the Virgin Mary alone, and often no saints at all were mentioned, only God. At Montpellier, two-thirds of wills in the 1740s had embodied florid religious preambles; by the 1780s the figure was below 1 per cent. The rate of charitable giving and donations to monasteries and religious bodies fell drastically. Fewer individuals took care to specify where they wished to be buried, while the glorious profusion of funeral arrangements either dwindled away to low levels or else were left to the discretion of family and heirs. Evidence from hospitals—whose administrations had made a profitable habit of hiring out their paupers (especially the children) to follow the hearse—concurs with this change.[159]

It was as though French men and women had forgotten how to die. Symptomatically, the religious literature which had outlined the protocols of the good death also registered a serious crisis over the eighteenth century: new titles declined after 1700, and whereas in the 1670s such works had constituted more than 5 per cent of the total French book production, they were far below 1 per cent for most of the eighteenth century. Their place within the Bibliothèque bleue was also much reduced.[160] These changes formed part of a broader, and similarly striking, picture of religious decline.

The proportion of religious titles among new books dropped like a brick over the course of the eighteenth century: among works which were published in Paris and which passed the censor, religious books comprised about half of total production at the end of the seventeenth century, but fell to a third by 1720, a quarter by 1750, and a tenth by the eve of the Revolution. Maybe half of all authors published between 1665 and 1702 had been ecclesiastics: the figure by the end of the Ancien Régime was under one-third.[161] Religion's role in print culture was unequivocally in decline. Works of piety constituted nearly half of

[158] Chaunu, *Mort à Paris*, 22 ff. (Paris); K. Norberg, *Rich and Poor in Grenoble, 1600–1814* (Berkeley & Los Angeles, 1985), 113 ff., 270 ff.; C. Jones, *Charity and 'Bienfaisance': The Treatment of the Poor in the Montpellier Region, 1740–1815* (Cambridge, 1982), 80 ff.; Bardet, *Rouen aux XVIIe et XVIIIe siècles*.

[159] Jones, *Charity and 'Bienfaisance'*, 85.

[160] D. Roche, 'La "Mémoire de la mort": Recherches sur la place des arts de mourir dans la librairie et la lecture en France aux XVIIe et XVIIIe siècles', *Annales ESC*, 31 (1976), 76–119; Andries, *Bibliothèque bleue*, 62.

[161] Martin and Chartier (eds.), *Histoire de l'édition*, 384.

the libraries of individuals inventoried *post mortem* in nine cities in western France at the end of the seventeenth century; by the end of the eighteenth, the figure was closer to a quarter.[162] Furthermore, works overtly attacking the Church and its teachings also multiplied over the course of the century: after all, Voltaire's watchword 'Écrasez l'infâme!' was nothing if not combatively anti-clerical. A very large number of works—many of them pornographic and some overtly anti-religious and anti-monarchical in character—were published clandestinely, often from just outside the French frontier, and distributed widely within a booming black market.[163]

It would be facile—no: wrong—to suggest that these changes were essentially and uniquely irreligious or anticlerical in their import. Fashions in piety change as well as irreligion, and there were numerous clerics and pious laymen in the Enlightenment who were happier with the barer, less ornate, and externalized piety often associated with the Jansenists than with full-blown and overly florid baroque piety.[164] Nevertheless, it seems clear that important changes were taking place in collective sensibilities, and that these changes denoted the diffusion of more secular, materialistic, and individualistic values in keeping with the kind of society emerging in the transformed social and intellectual environment. This change in *mentalités* was linked to the progress of commercial capitalism in the eighteenth century which we have already described, as well as, and even more than, the advance of religious indifference in intellectual circles.

Other evidence too attests a seismic shift in *mentalités* within French society over the eighteenth century away from the religious certitudes and gestures which had provided the framework for social life throughout the early modern period. Following a steady post-Tridentine rise which peaked in the 1740s, decline, and in some areas outright crisis, set in religious vocations. Though in Brittany a slowly ascendant curve of vocations continued to the end of the Ancien Régime, in most dioceses a falling-away was recorded from mid-century and had reached dramatic proportions by the 1770s. A slight rise from the late 1780s could not hide a generally negative balance-sheet, with a drop of 23 per cent in vocations over a forty-year period. The change was accompanied by a slowing-down of recruitment of priests from the social élite, with more artisans and peasants now drawn into the ranks of the priesthood. The fall was most

[162] Chartier, *Cultural Origins*, 69.

[163] The work of Robert Darnton is particularly important for this sector of the book trade. For a brief overview, see his 'Philosophy under the Cloak', in id. and Roche (eds.), *Revolution in Print*; and id., *The Literary Underground of the Old Regime* (Cambridge, Mass., 1982). And cf. Chartier, *Cultural Origins*, 71 ff.

[164] On this point, see esp. P. Ariès, *The Hour of our Death*, Eng. trans. (Harmondsworth, 1983), 196–7.

marked among the monastic clergy: Benedictine and Franciscan numbers fell by a third, the Visitandines by much the same. The only bright spot here was the continuing vitality of the female teaching and nursing communities associated with the social mission of the post-Tridentine Church: the Daughters of Charity continued to recruit well, for example, and by 1789 represented about one-seventh of the total numbers of women religious.[165]

The fossilization-cum-folklorization of religious festivals and processions remarked on in certain regions by the last decades of the century pointed to an absence of sources of renewal and vitality at the heart of lay piety more generally, which was evident at all levels of religious observance. Easter attendance at mass had since Trent been viewed as a supreme test of adherence to the Church. The picture of virtual unanimity in this sphere at the end of the seventeenth century receded. Bishops and parish priests began worrying about a small minority of recalcitrants. By the end of the Ancien Régime, evidence from Lower Languedoc suggested that perhaps one in ten of villagers no longer performed the Easter duties. Towns too harboured large numbers of *non-pascalisants*. The fear was that only pressures of social conformity were preventing larger numbers joining the ranks of the religiously indifferent. Certainly village disputes which opposed the parish priest to a more turbulent youth counter-culture, orientated around the local bar (*cabaret*) and preferring dancing and *boules* to attendance of mass, seemed to suggest the fear was well grounded.[166] Anxieties that contraception was being practised on a systematic level in the last years of the Ancien Régime in some rural parishes also pointed to a growing attitudinal divergence from traditional Catholic social teaching. The dramatic rise of illegitimacy and prebridal pregnancy rates in town and country alike suggested that traditional codes of sexual behaviour were being massively realigned with new religious norms.[167]

Whilst the clergy was experiencing difficulty, the ranks of the activist laity—the *dévots*—were also in disarray. The age of Enlightenment produced few of the sterling and committed lay militants who had illuminated the religious history of the seventeenth century. Indeed the confraternity, which had been an important mobilizing mechanism and pastoral instrument at the height of the

[165] J. Quéniart, *Les Hommes, l'Église et Dieu dans la France du XVIIIe siècle* (Paris, 1978), 297 ff. For the Daughters of Charity and other nursing communities, see C. Jones, *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989). Cf. Chartier, *Cultural Origins*, 100–1.

[166] E. Le Roy Ladurie, *Les Paysans de Languedoc* (2 vols.; Paris, 1966), ii. 890; P. Hoffman, *Church and Community in the Diocese of Lyon, 1500–1789* (New Haven, 1984), 146 ff.; O. Hufton, 'Attitudes towards Authority in Eighteenth-Century Languedoc', *Social History*, 3 (1978), 292 ff.

[167] See above, pp. 367–8. Cf. Dupâquier (ed.), *Histoire*, 373–98; and Quéniart, *Hommes*, 226 ff.

Counter-Reformation, went into eclipse. Even after the abolition of the Company of the Holy Sacrament in the 1660s, provincial branches of the confraternity had continued to meet and act as a powerful pressure group on local social and charitable ventures: they were active in Lyons, for example, down to the 1740s.[168] The Marian confraternities associated with the Jesuits went into decline too, even before the order's expulsion in 1762 completed the rout of many local groupings.[169] In the Midi, one of the most influential lay groupings, the confraternities of *pénitents*—which offered members mutual spiritual edification plus the opportunity for the practice of charitable acts, notably attendance at members' burials—also went into decline. The membership became more plebeian as members of the traditional élites who had formerly been among the most enthusiastic members and officials drifted away from their ranks—often to profit from the sociability offered by a less religious, more secular grouping, namely the Freemasons, whose lodges proliferated in the midst of the *pénitent* decline.[170]

Symptomatically, the miracle—that stock-in-trade of post-Tridentine evangelism—was in marked decline. At the pilgrimage shrine at Ardilliers in Saumur, home to more than a miracle a year in the seventeenth century, there were no more miracles after 1713, while at Notre-Dame-de-Verdelais in the Guyenne, which produced over one hundred miracles between 1626 and 1674, there were none in the eighteenth century at all.[171] Most of the miracles at these sites had been cures, and other evidence suggests a decline in trust in the therapeutic value of the miraculous. The Life of St Roch, patron saint of plague and a staple in the Bibliothèque bleue in the previous century, for example, was rarely reprinted in the eighteenth.[172]

The widespread scepticism over the alleged miracle cures taking place among the Jansenist 'convulsionaries' in the cemetery of Saint-Médard parish in Paris testified in much the same sense. The burial here in 1727 of the Jansenist deacon François de Pâris brought flocks of his supporters to sit in vigil and, subsequently, to claim to benefit from the saint's remains in the form of healing miracles. Louis XV's closure of the cemetery instigated the famous epigram

[168] J. P. Gutton, *La Société et les pauvres: L'Exemple de la généralité de Lyon, 1534–1789* (Paris, 1970), 384.

[169] L. Châtellier, *The Europe of the Devout: The Catholic Reformation and the Formation of a New Society* (Cambridge, 1989).

[170] The classic demonstration of this shift is M. Agulhon, *Pénitents et francs-maçons dans l'ancienne Provence* (Paris, 1968). See too G. Laurans, 'Contribution à l'étude des confréries en Bas Languedoc', doct. thesis, Montpellier Univ., 1973, pp. 121 ff.; and Quéniart, *Hommes*, 294 ff.

[171] J. de Viguerie, 'Le Miracle dans la France du XVIIe siècle', *Dix-Septième siècle*, 35 (1983), 313, 330–1.

[172] Andries, *Bibliothèque bleue*, 62. St Roch increasingly switched identity to become known more as the patron saint of dogs than as the greatest of the plague saints.

De Par le Roi, défense à Dieu
De faire miracle dans ce lieu

—a *bon mot* which managed to combine wit with both religious scepticism and political irreverence.[173] Though in practice the medical community, customary forensic yardstick of claims to non-natural healing, was split on the cases, there was sufficient scepticism about the reality of the cures to demonstrate that the age of miracles had come to an end.

The attractiveness of frameworks of sociability and of explanation provided by the Church triumphant in the seventeenth century seemed to be palling, to the benefit of the more secular and more convivial informal institutions and reflexes of the bourgeois public sphere. This shift was, however, strongly differentiated according to the circumstance of gender. As we have seen,[174] males dominated the bourgeois public sphere. They led a shift away from piety which was far from uniformly copied by women. The *dévot* might have been becoming a thing of the past, but the *dévote*, the woman engaging in pious good works and continuing her regularity in religious observance was an eighteenth-century phenomenon still. By all tests of piety, moreover, women were outdistancing males by the end of the Ancien Régime, as a pattern of sexual dichotomy in religious involvement evolved. In Montpellier, for example, the drop in the proportion of wills with pious bequests from 61.7 per cent in the 1740s to 26 per cent in the 1780s overlaid a contrast with figures for men (56 per cent to 13 per cent) and women (66 per cent to 35 per cent).[175]

The growing sexual dichotomization of lay piety was marked not only in terms of cultural participation but also in a major shift in social ideologies and cultural expectations. Notable here was the process by which the Jansenist convulsionaries of Saint-Médard were discredited in the eyes of public opinion. There is a good deal of evidence to show that the supporters of the miracles of deacon Pâris in the early 1730s were diverse in both social and gender terms, and included, for example, male members of *épée* and (particularly) *robe* nobilities and the professions (including a fair admixture of physicians). Yet the movement was consistently satirized and assailed by being portrayed in terms of the

[173] Esp. since, as Voltaire remarked, on noting the effective end of the miracles, God seemed to obey! For the Jansenist convulsionaries, see Kreiser, *Miracles, Convulsions and Ecclesiastical Politics*; C. L. Maire, *Les Convulsionnaires de Saint-Médard* (Paris, 1985); D. Vidal, *Miracles et convulsions jansénistes au XVIIIe siècle: Le Mal et sa connaissance* (Paris, 1987); and L. Wilson, *Women and Medicine in the French Enlightenment: The Debate over* Maladies des Femmes (Baltimore, 1993), ch. 1.

[174] See above, Sect. D.

[175] 'Sexual dimorphism' in religious practice was classically highlighted by the great religious sociologist G. Le Bras: see his *Études de sociologie religieuse* (2 vols.; Paris, 1956), *passim*. It has been confirmed for the eighteenth century in large numbers of subsequent studies. For the Montpellier case, see Jones, *Charity and 'Bienfaisance'*, 80 ff.

ILLUSTRATION 11. The cemetery of Saint-Médard, Paris, early eighteenth century. The miracles produced around the tomb of the Jansenist deacon, François de Pâris (who had died in 1727), produced crowds of eager pilgrims, much to the displeasure of Paris' religious authorities. Sceptics mocked believers in the 'miracles' as 'convulsionary', hysterical women, yet the crowd depicted here shows a mixture of gender and rank: bearing a sword at front, right, for example, is a nobleman.

classifiable hysteria of lower-class females, whose trances, convulsions, and healing claims were a source of much male mirth. It is of course quite possible that some women were attracted to the Saint-Médard movement because it offered them 'power and authority and an opportunity to be heard free of the censorship of a father, husband, or confessor'.[176] More important than this in terms of cultural development, however, was the process of gendering here in play in regard to representations of health, spirituality, and politics. Women were being seen as more prone to religious enthusiasm through the disorders of

[176] Wilson, *Women and Medicine in the French Enlightenment*, 32. This work is esp. useful on the gender aspects of the case, but overstates, as here, its political dimensions. The statistics in Vidal, *Miracles et convulsions jansénistes*, 173 f., suggest one-third of the convulsionary miracles concerned men; and that the social breakdown showed 16.5 per cent for clerics, 17 per cent for the upper classes, 10.5 per cent for merchants, and 23.5 per cent for the petite bourgeoisie, leaving only 32.5 per cent for the lower classes.

their body: a theological option was being smeared by being viewed as the product of a specifically gendered medical complaint, hysteria.

In order to understand the force of the cultural processes engaged in the Saint-Médard episode, we need to contextualize the changing place of women during the eighteenth century not only within the Church and within the bourgeois public sphere, but also within the family. As we have seen, the strategic role of marriage in holding together the demographic Ancien Régime was being progressively eroded over the eighteenth century. Varied employment possibilities opened up by capitalist development made increasingly obsolete the old pattern whereby couples had deferred marriage until a niche had opened up in the property-market. A more varied pattern emerged: the average age of marriage rose, but couples were frequently accused of marrying too young too as, seemingly, emotion prevailed over interest in the choice of partner and the decision of the timing of marriage.[177] Certainly among middling and élite groups at least, a new domestic ideology was emerging, stimulated (though hardly originated) by Rousseau's writings, and neatly dovetailing with public sphere ideology. Rousseau's blueprint for children's education, *Émile*, was geared around the needs of boys, not girls; he had no place for women in the direct democracy sketched out in his *Social Contract*; and, as we have seen, he saved some of his sharpest barbs for *salonnières*, whose female guiles he held responsible for the effeminization of political culture. While menfolk were now to engage in the rational exchange of views, they were to keep their women at home.[178]

Women were increasingly squeezed out of the organisms of the public sphere, retaining only an exiguous, decorative, and highly criticized role. In these circumstances one can better understand something of the persistent attraction for women of the Church, which might have freely accepted the idea of women's inferiority, but which did at least reserve a public place of choice to women and women religious. As compensation for their less comfortable role in bourgeois public life, the home opened up as a space for the full and untrammelled deployment of 'womanly' (this normally meant maternal) virtues. A growing concern with the welfare of children highlighted a more heavily pronounced division of marital labour, with women being accorded responsibility for the environment in which children were brought up.[179]

[177] The rise in illegitimacy and pre-bridal pregnancy rates seems to suggest that something important was happening in the relationship between love, sex, and marriage. See also Dupâquier (ed.), *Histoire*, chs. 7, 8, 9; and F. Lebrun, *La Vie conjugale sous l'Ancien Régime* (Paris, 1975).

[178] See above, pp. 393–4, and nn. 98, 148. In *Émile*, Rousseau's girl-figure, Sophie, receives education: but it is emphatically not designed to kit her out for the public sphere, but rather to prepare her for productive domesticity.

[179] For these developments, the classic P. Ariès, *Centuries of Childhood*, Eng. trans. (Harmondsworth, 1962) is still of primordial importance.

If the ideological tenor in the family environment was changing, so too was the material look of the home. Post-mortem inventories over the century, which allow us to glimpse the material culture of the urban population, reveal a massive, silent transformation occurring in the styles of life. The work of Daniel Roche and Annik Pardailhé-Galabrun on eighteenth-century Paris in particular suggests a veritable consumer boom which spread down well beyond the social élite to the artisanal and shopkeeping classes and below.[180] The more diffuse presence of the book within the home[181] was part of a larger pattern of consumer materialism. Furnishings and room-space in the dwellings of the popular classes showed greater functional differentiation, more awareness of fashion, and a greater preoccupation with intimacy. Kitchens became more differentiated from bedroom and living space, and the accoutrements of each underwent a clear evolution: cooking utensils became more numerous, varied, and functional, eating implements became more common—the fork in particular began a slow conquest of the popular classes—and crockery changed from being predominantly metallic towards porcelain, pottery, and even china. The arrival of the coffee-pot—nearly 40 per cent of homes in central Paris could now boast one[182]—witnessed to an evolution in popular taste and the adoption of élite fashions. In the bedroom, the bed became more ornate and showy, while the stand-by store-chest was increasingly replaced by wardrobes, cupboards, and chests of drawers. On the walls, dusty old tapestries were ousted by wallpapers, engravings, and pictures, and by mirrors, one of the most characteristic forms of the new consumerism. Showy pieces of furniture such as writing-tables, card-tables, and coatstands were becoming more common; snuffboxes, teapots, razors, umbrellas, and chamberpots were also found in greater abundance; 'populuxe' products—cheap versions of cultural artefacts formerly categorized as the luxuries of the well-to-do—such as porcelain plates and clocks (as well as mirrors) also became more widespread.

This 'revolution in objects'[183] highlighted the growing construction of a new private body. From the bric-à-brac of popular material culture, a body more cared-for, more *soigné*, more conscious of appearance, and far more heavily gendered was being created. People spent more money on clothes and these in turn became more showy and responsive to changes in fashion. Old woollen garments worn year in, year out were replaced by more seasonally attuned and lighter garments. Even the grossest of workmen abandoned straight trousers for

[180] Roche, *People of Paris*; Pardailhé-Galabrun, *The Birth of Intimacy: Privacy and Domestic Life in Early Modern Paris*, Eng. trans. (Oxford, 1991); and C. Fairchilds, 'The Production and Marketing of Populuxe Goods in Eighteenth-Century Paris', in J. Brewer and R. Porter (eds.), *Consumption and the World of Goods* (London, 1993).

[181] See above, p. 382. [182] Pardailhé-Galabrun, *Birth of Intimacy*, 94.

[183] Roche, *France des Lumières*, 501.

the breeches (*culottes*) which were the outward sign of gentility. Lighter fabrics triumphed over heavy wool garments. Body linen in particular became extremely widespread: the new taste for fashion could proclaim itself healthier than what had gone before. While men preferred the sombrer, more reserved shades, women's clothes became more varied in weight, colour, and consistency, and more attuned to fashion. A new kind of conspicuous consumption took root which made it possible for observers to mistake a dairymaid for a duchess—much to the chagrin of those traditionalist moralists who would have preferred the hierarchy of the society of orders to be immediately legible to the naked eye.[184]

The new consumerism was most overt in Paris, in the urban milieu more generally, and among women in particular. Home demand was essential to France's economic growth: between two-thirds and three-quarters of economic transactions were domestic ones. Luxury, semi-luxury, and populuxe goods (which were also among France's favoured export items) thus had a key role in fuelling economic growth. Fashion tended, moreover, to follow the capillary intricacies of networks of distribution and exchange being opened up by commercial capitalism. Second-hand stalls, old-clothes dealers, and menders and repairers became essential parts of a developing world of consumer fashion. Print too, as one might expect, played a key role: the appearance of provincial advertisers (the *Affiches*), present in nearly fifty cities by 1789, and a strong fashion press attested the buoyancy of the market for consumer goods which was being developed.[185]

Through the medium of print which was the underpinning of the bourgeois public sphere, a new and powerful chain of connection was being constructed: not the chain of dependence and hierarchy of corporative France nor even that connecting together the rational subjects of an absolutist monarchy now claiming to embody Reason as well as *raison d'état*. Rather, this chain linked consumer to consumer, citizen to citizen, and formed a Great Chain of Buying (and Selling), if we can call it that,[186] in which private and public needs intersected: the theatre of public display and dressiness on the one hand accompanied the development of the home as the locus for a new individualism, a more developed gender balance, and growing sense of intimacy. The transformation of *mentalités*, grounded in what we have perhaps grandiloquently called the 'triumph of life', offered fertile ground for those individuals and bodies offering health goods and services and helping to sustain the new 'culture of appearances'.

[184] On this general theme, see D. Roche, *La Culture des apparences: Une histoire du vêtement (XVIIe–XVIIIe siècles)* (Paris, 1991).

[185] For the *Affiches*, see below, Ch. 10, Sect. C.

[186] Cf. Jones, 'Great Chain of Buying'.

F. Productive Bodies, Morbid Bodies

The eighteenth century experienced the beginnings of the demographic revolution and the epidemiological transition. It also witnessed a massive and deep-rooted shift in *mentalités* and a developing consumerism—phenomena both linked to the growth of religious indifference and the development of commercial capitalism. Taken together with the further progress of bureaucratic controls within the French state, these factors configured a massive transformation in the context in which medicine was practised—a change which extended to cover the expectations of clients as well as the world-view of practitioners.

Important shifts were consequently occurring in the meanings ascribed to death and disease, and the relationship between the two. With more secular attitudes on the rise, and with death dethroned from its position as keystone of triumphant post-Tridentine evangelism, the focus had shifted from the moment of death to eternity's prelude, namely prior experience of life—and disease. The *philosophes*' expectations of medicine and health in producing societal happiness must be seen in the context of the transformation occurring within the epidemiological landscape and the changing cultural climate. Attention was now less fixed on the trauma-laden and putrescent corpse which had dominated representations of disease in an epidemiological landscape in which bubonic plague held pride of place. The decline in mortality triggered a discursive explosion to do with disease, as the focus now passed onto the morbid body.

The morbid body, moreover, had a twin: the body as a productive mechanism. Government policy, stimulated both by depopulationist fears and influenced by the ideology of Enlightenment emergent in the bourgeois public sphere, made of remediable and especially preventable sickness a particular target of state action so as to produce the more productive labour-force which a great power required. In this, public desiderata chimed with private needs, for good health had become a major objective of private individuals. Physicians found themselves newly valorized as potential technicians of the healthy body both by the state and through the mechanisms of private demand.[187] Many of the most buoyant parts of eighteenth-century medical publishing would be precisely where those two preoccupations intersected, and where, too, considerations of sexuality and gender were also in play: notably venereal diseases, maternal welfare, and child health. There were 500 works devoted to venereal disease

[187] Our position on this overlaps (but is not conterminous) with the discussion of medicine and sexuality in the Enlightenment in M. Foucault, *The History of Sexuality*, i. *An Introduction* (New York, 1978). We are also drawing on the line of arguments associated with the name of Norbert Elias: see esp. his *The Civilizing Process*, i. *The History of Manners*, Eng. trans. (Oxford, 1983).

between 1670 and 1815, for example, as against fifty in the century before.[188] Syphilis was both a public and a private matter. A demographic threat as well as a moral scourge, it sapped the productive body, was a special worry within the state's armed forces, and inhibited an effective riposte to depopulationist fears. Sex and the family were more within the purview of the state than ever before, and did not escape the imprint of changing views of gender. The mundanities of obstetrical care became major focuses of concern. Smallpox inoculation, for example, owed much of its *éclat* in the eighteenth century to the fact that the reduction of child and maternal mortality from the disease opened up a rosier demographic and economic future for France, quite apart from private felicity for the individual and the family. Saved mothers and children came first, for they were tomorrow's consumers, producers, and reproducers.

'Medicine is a commodity that everyone wants', ironized the physician-*philosophe* La Mettrie in the late 1740s. Physicians, as technicians of this new body, were like so many 'merchants in medicine', 'kinds of traders who all go hunting for gold and silver, though by different and circuitous routes'.[189] This was satire; but it was telling, prophetic satire. Health was becoming a commodity like a racehorse or an umbrella, and medical practitioners were transmuting into technicians of the morbid body. The commercialism and consumerism abroad in French society in the last half-century of the Ancien Régime had profound implications on how medical practitioners viewed what exactly they were engaged in and how they, and their clients, organized their lives.

This new context in which medicine was practised could not, finally, but have destabilizing consequences for the medical world as a whole. That world had been relatively tranquil in the seventeenth century, when context, medical ideology, and the structure of medical practice all intermeshed. Conversely, any significant change to one part of the system would be sure to upset the harmonious functioning of the whole, unless remedial action could be taken to bring the system back into balance. Above all, how could a system of medical delivery organized around two relatively distinct fields of medical practice and based on principles of deference to the sick, limited choice of practitioner, and high rates of medical failure survive a sudden boost to levels of demand for health provision from the sick? The remainder of this book will examine what happened to the other parts of the medical world in the wake of these new attitudes towards health, disease, and death. It will reveal a medical world slowly imploding under stresses of adaptation which were internal as well as external. As we will see in

[188] Martin and Chartier (eds.), *Histoire de l'édition*, 209.

[189] [Julien Offray de La Mettrie], *Ouvrage de Penelope, ou Machiavel en médecine* (2 vols.; Berlin, 1748–50), i. 146 f.

Chapter 7, no other part of the medical world underwent such profound change as its ideological underpinning, for the Enlightenment and the Scientific Revolution from which it derived directly affected the content of medical science and not just the context of practice. Ideological change threw up new challenges to the inherited structure of medical practice that were potentially just as subversive as the social and demographic transformation and the consequent new attitudes towards disease and death.

7

THE MEDICAL ENLIGHTENMENT

A. An Age of Ideological Ferment

In the sixteenth and seventeenth centuries the dominant ideology that underlay the practice of medicine had been largely a stable construct: faculty Galenism. This, it will be recalled, was an eclectic medical philosophy, relatively open to new theories and discoveries, but one whose fundamental contours remained unchanged, even after the absorption of iatrochemical ideas in the 1670s and 1680s. Broadly speaking, sixteenth- and seventeenth-century Galenism was a dogmatic, rationalist medical science, which believed that health and disease were determined by the optimum qualitative balance of the humours and solids. This was a philosophy with a very limited capacity for experiential exploration. As practitioners, Galenic physicians might place great emphasis on experience, on their being able to provide an accurate prognosis from studying the outward signs of disease and being able to anticipate the external effects of a particular treatment. As medical scientists, however, Galenists were primarily interested in being able to demonstrate their learning by explaining experience in terms of their inherited physiological suppositions. They were not in the main interested in exploring the solidity of their conclusions by empirical research. Diagnoses consisted of a series of individual stories which few physicians were seriously interested in empirically verifying after the event. Post-mortems certainly increased in the seventeenth century, especially on the bodies of the great and good, but the practice was seldom used as an aid to increased knowledge, merely to confirm the physician's perspicacity.[1] Obviously, the period saw important advances in practical anatomy, especially with the work of Harvey, but this led to an adjustment in the way the internal body was described, not to the abandonment of Galenic principles. The faculty professors in the third quarter of the seventeenth century may have been no longer locked into a closed ideological

[1] Autopsies were always performed on monarchs to confirm they had not been poisoned. See the reports on Charles IX, Henry III, and Henry IV in Jacques Guillemeau, *Les Œuvres de Chirurgie* (Rouen, 1649 edn.), 853–63. Admittedly, by the early 17th cent. autoptic evidence was sometimes cited to challenge assertions of the ancients. In 1622 an Aix student, Jacques Bontemps, argued that dissection evidence suggested Hippocrates was wrong to associate blood and pus in the urine with an ulcerated kidney: see BL 1180 b 11(5), 'An puris, aut sanguinis mixtio renum, aut vesicae exulcerationem significant?'.

universe but their primary response to new ideas was to integrate them into the Galenic tradition, not jettison that tradition completely.[2]

In contrast, the ideology which underlay medical practice in the eighteenth century (at least the practice of the corporative community) was not Galenic, nor was it stable. In the first place, in the final decade of the seventeenth century the qualitative medical philosophy which had been dominant for five hundred years was swiftly replaced by a mechanical model of medical science that tried to explain life solely in terms of matter in movement. Initially, this new medical philosophy was as rationalist and closed as its Galenic forebear, but by the mid-eighteenth century it had become increasingly a heuristic device, an explanatory apparatus whose basic assumptions were impeccable but whose physiological or pathological narratives had to be tested on the anvil of experience. On the eve of the French Revolution any attempt to provide a complete and coherent account of the internal mechanism of the body had been abandoned. Some medical philosophers, under the influence of vitalist ideas, gave up the enterprise altogether in favour of the observational study of the living patient, while others presented iatromechanism as a science in the making, one slowly cobbled together after painstaking empirical enquiry. Medical ideology in France in the hundred years before the Revolution was thus a dynamic construct. Whereas a physician in 1650 would have largely inhabited the same ideological landscape as his predecessor in 1500, a physician active in 1789 lived in a world that his grandfather would scarcely have recognized.

To understand the radical paradigmatic shift of the 1690s and its subsequent epistemological development, it is necessary to view the change in a wider cultural context. At no time in the early modern period was medicine ever established as an autonomous discipline: it was a subset of natural philosophy or physics, which was itself a part of a broader science of philosophy.[3] The dominance of a qualitative medical science in the sixteenth and seventeenth centuries reflected the dominance of scholastic Aristotelianism in contemporary philosophical culture. Similarly, the appearance of a mechanist medicine reflected the wider dethronement of Aristotle and the triumph of Descartes in the realm of the physical sciences.[4] The turn of the eighteenth century witnessed a radical explanatory shift in natural philosophy *tout court*, one that was all the more com-

[2] See above, Ch. 2, Sect. F.

[3] Admittedly the second half of the 18th cent. saw the first attempts to separate the physical from the biological sciences, to which medicine would henceforth belong: see below, Sect. B.

[4] Descartes specifically confirmed that medicine was a branch of natural philosophy, by emphasizing in his *Discourse on Method* (1637) that the benefits that would accrue from his new science would be in the medical realm: see *Discourse on Method and the Meditations*, trans. and intro. F. E. Sutcliffe (Harmondsworth, 1968), 91; see also Descartes's personal picture of the tree of knowledge in his preface to the 1647 French trans. of his *Principia philosophiae*, in id., *Œuvres philosophiques*, ed. F. Alquié (3 vols.; Paris, 1963–73), iii. 779–80.

plete in that there was now a single, hegemonic institution determining scientific orthodoxy: the Paris-based Academy of Sciences. In the sixteenth and the first half of the seventeenth centuries this role had been loosely performed by the Paris Faculty of Theology, but its interventions were infrequent and negative.[5] With the foundation of the Academy of Sciences in 1666 the natural sciences were increasingly emancipated from ecclesiastical control, and the state-appointed *académiciens* eventually gained both the freedom to hold any physical philosophy that was not incompatible with Christian faith and the power to shape French scientific culture.[6] As the Academy of Sciences, at least from 1699 when the dogmatic Cartesian Bertrand Le Bouvier de Fontenelle (1657–1757) became secretary, was a mechanist stronghold, not surprisingly the biological sciences (whose most fecund investigators were themselves members of the august institution) were rapidly mechanized.[7] Almost overnight at the turn of the eighteenth century physicians ceased to be Galenists and became iatromechanists.[8]

However, the *académiciens* remained dogmatic mechanists only until the 1740s. Thereafter they quickly accepted that natural phenomena could not be easily, if at all, explained in terms simply of inert particulate matter in motion. The reason for the change of heart lay in the Academy of Sciences' failure to provide a mechanical explanation of Newton's observationally validated mathematical law of planetary interaction. According to Descartes and his followers the planets were mechanically whirled round the sun in vortexes of subtle matter. Newton disagreed, on the grounds that the behaviour of bodies in vortices was not consistent with his inverse square law, and posited, at least on a phenomenological level, the existence of non-mechanical forces in the universe. The French academicians of the first half of the eighteenth century tried

[5] e.g. in 1624 the Faculty of Theology forced the Paris Parlement to issue an edict against Paracelsian and atomist ideas, which outlawed the promotion of all anti-Aristotelian positions on pain of death: see Charles Duplessis D'Argentré, *Collectio judiciorum de novis erroribus qui ab initio duodecim saeculi ... in ecclesia proscripta sunt* (3 vols.; Paris, 1728–31), ii. 146–7.

[6] The organizational role of the Academy of Sciences is best explored through R. Hahn, *The Anatomy of a Scientific Institution: The Paris Academy of Sciences 1666–1803* (Berkeley & Los Angeles, 1971); A. Stroup, *A Company of Scientists: Botany, Patronage, and Community at the Seventeenth-Century Parisian Royal Academy of Sciences* (Berkeley & Los Angeles, 1990); C. B. Paul, *Science and Immortality: The Éloges of the Paris Academy of Sciences (1699–1791)* (London, 1980).

[7] The Academy of Sciences was first sectionalized in the reform of 1699. For the work of its members in the life-sciences, see C. Salomon-Bayet, *L'Institution de la science et l'expérience du vivant: Méthode et expérience à l'Académie Royale des Sciences 1666–1793* (Paris, 1978). Until 1699 dogmatic mechanists had been banned from the academy, but most of its members in the 1690s had a mechanist allegiance of sorts.

[8] The term 'iatromechanist' to describe supporters of mechanical explanations of life is the creation of historians, as is its derivative 'iatromechanism': see the comments in L. S. King, *The Philosophy of Medicine: The Early Eighteenth Century* (London, 1978), ch. 5.

gamely to save the Cartesian theory but, no matter how the vortexes were arranged, were unable to provide a mathematical description of their motion which satisfied the Newtonian law. Consequently, a younger generation in the mid-eighteenth century gave up the fight and accepted the possibility of mutually attracting particles.[9]

Some *académiciens* were ready to accept that attraction was an actual property of matter; others remained sceptical even on the eve of the Revolution, and insisted that the mechanism behind mutual attraction would one day be known.[10] Regardless, all were agreed that natural philosophers should no longer contest the phenomenological existence of other forces in the universe besides the mechanical but rather experientially explore and define them. In consequence, the *académiciens* of the last fifty years of the Ancien Régime can be described as Newtonians, natural philosophers dedicated primarily to the collection and, where possible, mathematical investigation of phenomena, and not the erection of dogmatic philosophical systems of the Aristotelian and Cartesian kind. Inevitably the Newtonian moment, just like the Cartesian one that preceded it, profoundly affected every aspect of contemporary natural science.[11] As a result, in the second half of the century medicine, too, became more empirically orientated, and bolder spirits, willing to accept the reality of a multiple-force universe, began to argue that organic matter had a peculiar vital and organizational power.[12]

Although the displacement of a dogmatic, rationalist, and qualitative medical philosophy by an increasingly probabilist and empirical iatromechanism was the most fundamental ideological shift in the final century of the Ancien Régime, it was not the only significant change in the science of medicine over this period. Medicine, more than other branches of natural philosophy, was a

[9] E. J. Aiton, *The Vortex Theory of Planetary Motion* (London, 1972). The best account of the Academy of Science's mechanism in the first half of the century is P. Brunet, *L'Introduction des théories de Newton en France au XVIIIe siècle avant 1738* (Paris, 1931). The first Frenchman to support the phenomenological existence of attraction was Pierre-Louis Moreau de Maupertuis (1698–1759) in his *Discours sur les différentes figures des astres, avec une explication des systèmes de MM. Descartes et Newtown* [*sic*] (Paris, 1732); for a recent discussion, see D. Beeson, *Maupertuis: An Intellectual Biography* (*Studies on Voltaire and the Eighteenth Century*, 299; Oxford, 1992), ch. 3.

[10] The debate and its theological implications is explored in J. Ehrard, *L'Idée de nature en France à l'aube des lumières* (Paris, 1963), ch. 3, sect. ii. The leading exponent of the reality of attraction was Maupertuis who believed that the force was a property permanently superadded to matter by divine will, a form of permanent miracle. A leading sceptic was the abbé Jean-Antoine Nollet (1700–70), a pioneer in the study of electricity: see his *Leçons de physique expérimentale* (2 vols.; Paris, 1753), ii. 410–14.

[11] For its effect on classroom physics, see L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), 360–71.

[12] For a detailed exploration of medical mechanism and vitalism in the 18th cent., see below, Sect. B.

practical art as well as a theoretical science. The eighteenth century witnessed profound changes not only in the way that health and disease were understood but in the manner in which the field and the ambitions of medical practice were circumscribed. This was an age that saw significant extensions to the concept of the medicable, a far greater emphasis on prophylaxis or hygiene, and a novel optimism about the future therapeutic potential of medical science. In the eighteenth century the opinion-formers within the corporative medical community embarked on a campaign of territorial aggrandizement, often at the expense of the Church.[13] The underlying impetus in this case came not from the Scientific Revolution but the Enlightenment with its new optimistic and secular value-system that stressed the possibility of change and amelioration.[14] Although none of the first-rank *philosophes* was a medical man, except Julien Offray de La Mettrie, there were several, like Diderot, who were fascinated by medical science, and the movement boasted many medical practitioners in its second division, including the thirty-odd physicians, surgeons, and apothecaries who contributed to the *Encyclopédie*. Indeed, it was a Leiden medical graduate, the chevalier Louis de Jaucourt (1704–79), who was the most prolific contributor to this archetypal Enlightenment work.[15] Medical men, too, played an important part in the burgeoning bourgeois public sphere, being particularly prominent and overrepresented among the membership of the newly founded provincial academies.[16] It was inevitable, therefore, that the corporative medical community, an archetypal Ancien Régime institution, would be carefully scrutinized to see how it could better serve the happiness of the greatest number, especially as *philosophes* like Diderot emphasized that happiness and health were synonymous. Medical progress was to be the touchstone of the success of the Enlightenment enterprise.[17] The extended field of medical practice was thus part of a specifically medical Enlightenment.

As in previous centuries the elaboration of the new medical ideology was primarily the work of graduate physicians attached to faculty colleges, especially Paris and Montpellier. Yet, in complete contrast with an earlier period, this ideology was not exclusively the construction of faculty physicians. To begin with, a number of prominent surgeons not only helped to demonstrate the possibility of medical progress through their development of innovative and successful operative techniques, but they also took it upon themselves to

[13] See below, Sects. C and D. [14] See above, Ch. 6, Sect. C.

[15] H. Zeiler, *Les Collaborateurs médicaux de l'Encyclopédie de Diderot et d'Alembert* (Paris, 1934).

[16] See above, Ch. 6, Sect. D.

[17] See P. Gay, 'The Enlightenment as Medicine and Cure', in W. H. Barber *et al.* (eds.), *The Age of the Enlightenment: Studies Presented to Theodore Besterman* (London, 1967), esp. 376.

trumpet in print their discoveries and the virtues of hands-on experiential investigation.[18] Admittedly, surgeons had contributed to the development of medical science before—one thinks immediately of Ambroise Paré. However, they had done so intermittently—most surgical works before 1680 were written by physicians—and surgeons had stuck to their artisanal last.[19] They had not previously helped to stimulate a novel medical ambience in the way that figures such as the Paris surgeon and contributor to the *Encyclopédie* Antoine Louis (1723–92) were to do.[20] In addition, the new ideology had an important lay or external element. Not only did *philosophes* such as Diderot make powerful theoretical contributions to the debate over mechanism,[21] but also many of the biological scientists whose research maintained the momentum of that debate, such as the naturalist René-Antoine Ferchault de Réaumur (1683–1757), were not medical men. For the first time, then, the formulation of mainstream medical science was not purely the prerogative of faculty physicians.[22]

The new medical ideology, furthermore, was not just the property of the educated élite. Although there had been some recourse to the vernacular, medical discourse in France was primarily conducted in Latin in the sixteenth and seventeenth centuries.[23] In the eighteenth century, in contrast, it became customary for publications on medical science to be written in French, even if Latin remained the predominant language of the faculty classroom.[24] This was true even in the field of medical polemic, where figures like the Paris physician Philippe Hecquet were already busy washing their dirty ideological linen in public in the first decades of the century.[25] In fact, publishing in Latin quickly

[18] Apothecaries in contrast made little contribution to 18th-cent. medical literature, although some were associated with the wider republic of letters. Voltaire in 1729 e.g. stayed with an erudite and internationally connected pharmacist at Dieppe: see R. Pomeau, *Voltaire en son temps*, i. *De l'Arouet à Voltaire* (Oxford, 1984), 257.

[19] See above, Ch. 2, Sect. B.

[20] Louis wrote 100 articles on surgery for the *Encyclopédie* and was responsible for 39 of the surgical illustrations. The surgeons also developed the new medical ideology in a way that served their interests rather than the physicians. For the phenomenon of the 'rise of surgery' in 18th-cent. France, see below, Ch. 9, *passim*.

[21] Diderot was the author of a treatise on physiology, and continually discussed the phenomenon of life from a materialist viewpoint in his dialogues, which circulated in manuscript during his lifetime.

[22] In the 16th and 17th cents. biological pioneers, such as Harvey and Pecquet, had not been faculty professors, but they had been learned physicians.

[23] See above, Ch. 2, Sect. B.

[24] Cf. below, n. 242. Student theses also continued to be written and debated in Latin, although they were occasionally translated and marketed as pamphlets.

[25] Hecquet's polemical works will be referred to on several occasions below. For his life and enthusiasms, see L. W. B. Brockliss, 'The Medico-Religious Universe of an Early Eighteenth Century Parisian Doctor: The Case of Philippe Hecquet', in R. French and A. Wear (eds.), *The Medical Revolution of the Seventeenth Century* (Cambridge, 1989).

became an oddity. As early as 1736, when the Montpellier graduate and professor at the Collège Royal, Jean Astruc (1684–1766), published a work on venereal disease in the classical tongue, he felt impelled to justify his choice in the preface, accounting for his linguistic conservatism on the grounds of the delicacy of the subject.[26] On the eve of the French Revolution, then, medical discourse was far closer than ever before to an ever-expanding general reading public and was no longer the perquisite of a privileged, classically trained few.

This linguistic change, of course, was not unique to medical science for it mirrored a general shift in eighteenth-century France towards vernacular publication in all the arts and sciences. The development reflected again the influence of the Enlightenment whose promoters decried the useless waste of time spent in teaching youth to write and speak dead languages.[27] As French was the new international language of communication in the eighteenth century, medical authors had no difficulties finding a readership outside as well as inside their native land. Moreover, the pull of French and specifically Parisian culture in the eighteenth century ensured that foreigners not only read the publications of French medical men, but also came in droves, especially in the first half of the eighteenth century, to sit at the feet of the nation's leading medical gurus. Although many, like the Swiss physiologist Albrecht von Haller (1708–77), came specifically to sample Parisian surgical know-how,[28] others were attracted by the international reputation of Astruc and his fellow physician-philosophers.[29]

However, the cultural traffic was never one-way. From the beginning of the eighteenth century medical works in other vernaculars were frequently being translated into French, while a number of French medical students, such as Jaucourt and La Mettrie, were going abroad to Leiden to listen to one of the great popularizers of iatromechanism Hermann Boerhaave (1668–1738). Although the eighteenth century saw the development of vernacular literary cultures, especially in France and Great Britain, it was also the century of Enlightenment cosmopolitanism and the erosion of national and confessional boundaries.[30] The

[26] Jean Astruc, *De morbis venereis libri sex* (Paris, 1736), p. x; he claimed also to write for a foreign market.

[27] See esp. D. Diderot (ed.), *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers* (17 vols.; Paris, 1751–65), iii, art. 'collège' by D'Alembert.

[28] Paris's growing contribution to surgery from the turn of the 18th cent. will be discussed below, Ch. 9, Sect. A.

[29] Astruc taught at Toulouse, Montpellier, and from 1730 at the Paris Collège Royal. The Wellcome Institute Library, London, contains several series of lecture notes taken down by British visitors to Paris. He wrote extensively and many of his works (notably on female and child diseases) were translated into English and German. For an account of his life, see the *éloge historique* in his posthumous *Mémoires pour servir à l'histoire de la faculté de médecine de Montpellier* (Paris, 1767), pp. xxxiii–lii.

[30] For a jaundiced reading of the cosmopolitanism of 18th-cent. European culture, see R. A. Houston, *Literacy in Early Modern Europe: Culture and Education, 1500–1800* (London, 1988),

British influence on French medical science was particularly fruitful. At the turn of the century the Parisian surgeon Jean Devaux (d. 1729) introduced the French to the experientialist works of Thomas Sydenham (1624–89) and his followers,[31] while after 1750 the vitalist critique of dogmatic iatromechanism was enforced, if not initiated, through the availability of translations of works such as the *Physiology* and *First Lines of the Practice of Medicine* of the Edinburgh physician William Cullen (1710–90).[32] Furthermore, French vitalists repeatedly used the work of English and Scottish physicians as paradigmatic examples of the kind of medical research they hoped to engender in their own land.[33]

French medical science in the eighteenth century, it must be emphasized, was always an international construct, and the changes in medical ideology which will be explored in detail in Section B were taking place in one form or other all over western Europe. Thus, the iatromechanical revolution which occurred in France at the turn of the eighteenth century was part of the European-wide rejection of Galenism.[34] It was conterminous, for instance, with the appointment of the renowned mechanist Friedrich Hoffmann (1660–1742) to a medical chair at the new Prussian University of Halle in 1693, and the elevation of Boerhaave to the first of his several chairs at Leiden in 1708.[35]

B. Mechanists, Vitalists, and Empiricists[36]

As we saw in Chapter 2, there was virtually no sign in 1690 that the age-old Galenic allegiance of the French faculties of medicine was on the point of being

ch. 9. It must be admitted that in the second half of the century, British interest in developments elsewhere markedly declined. See the disparaging remarks made by the Philadelphia physician and American Founding-Father Benjamin Rush (1745–1813), about Parisian physic, in 'Account of a Journey to Paris 1769', Pierpont Morgan Library, New York, MS MA 14, fos. 15–16.

[31] Sydenham's influence in France will be discussed below, Sects. C and D. Devaux also translated into French Latin medical works.

[32] These two works were translated by the Paris physician Édouard-François-Marie Bosquillon (1744–1814).

[33] There is no overview as yet of the British medical Enlightenment. A useful starting-point are the essays devoted to Great Britain and the American colonies in A. Cunningham and R. French (eds.), *The Medical Enlightenment in the Eighteenth Century* (Cambridge, 1990). On Cullen and Edinburgh in the period, see C. Lawrence, 'Medicine as Culture: Edinburgh and the Scottish Enlightenment', Ph.D. diss., Univ. of London, 1984.

[34] Admittedly Galenism survived on the fringes of the Continent. Galen seems to have been supplanted in the Castilian faculties only in the reforms of the 1770s and 1780s: see G. Addy, *The Enlightenment in the University of Salamanca* (Durham, NC, 1966), 105–6, 177.

[35] Boerhaave was the author of a number of highly influential iatromechanical textbooks. The standard biography is G. A. Lindeboom, *Herman Boerhaave: The Man and His Work* (London, 1968).

[36] This section is based on a detailed study of contemporary publications, professorial *cahiers*, and student dissertations. The dissertation record for the 18th cent. is particularly good. Sizeable collections exist from Paris, Montpellier, Caen, Reims, Toulouse, Angers, and Strasburg. The

renounced.[37] However, in the course of the next two decades an ideological revolution took place throughout the faculty system, as everywhere the traditional medical philosophy of forms and qualities was swiftly replaced by iatromechanism.

At Paris, where the dissertation record is particularly good, the revolution can be traced to the middle years of the 1690s, and took place, perhaps not fortuitously, just at the moment when the Faculty's ranks were reinforced by a number of learned and senior members of the former Chambre royale. Thus, the first Faculty bachelor to sustain an overtly mechanist thesis was the botanist, *académicien* (from 1691), and former Aix graduate Joseph Pitton de Tournefort.[38] When exactly Montpellier was converted to the new ideology is impossible to say, but it was probably at about the same time. Certainly by the turn of the eighteenth century there were notable iatromechanists among its professors, especially Pierre Chirac (1650–1732) and Antoine Deidier (d. 1732).[39] The smaller provincial faculties followed the lead of their prestigious sisters. There is evidence that Caen was teaching iatromechanism from at least 1705 and Avignon from 1713.[40]

Although mechanical models of health and disease retained a significant place in faculty medical discourse until the end of the Ancien Régime, the heroic age of iatromechanism in France encompassed the period 1690 to 1750. For these six decades faculty medical theory was in the grip of an uncompromising

Strasburg collection has not been consulted as it is clear from the extant matriculation register that the Faculty was predominantly the haunt of German students: for this, see above, Ch. 2 n. 25. The collections chiefly relied on are: BFMP TMP, 9 vols. in fo., vol. ix, and 16 vols. in 4°, vols. xiii–xvi; BFMM Printed Books 275005 (6 vols.) and 275010 (6 vols.); BM Reims Printed Books CRII MM 725 (6 vols.); AD Calvados [Caen] 1D 986–9, 991, 996; AM Toulouse GG 844; AD Maine-et-Loire [Angers] 4D 9.

[37] See above, Ch. 3, Sect. F.

[38] See his thesis 'Est-ne anima corporis facultatum principium?' (1695), in BFMP TMP info. ix, no. 1473. For the Chambre royale, see above, Ch. 5, Sect. E. Arguably, the Chambre royale was an institutional front for iatromechanism in a period when the new medical ideology had no support within the faculties.

[39] Appointed 1687 and 1697 respectively. It is possible that Chirac taught the new medical ideology from his appointment; unfortunately, although many transcriptions of his courses survive in the BFMP, BFMM, several *bibliothèques municipales*, and at the Wellcome Institute in London, it is often difficult to date them precisely. As in Paris there was almost certainly a coterie of practising physicians who had embraced iatromechanical tenets before they were officially endorsed by the Faculty; e.g. the Montpellier physician Raymond Vieussens (*c.*1635–1715), who published on the nervous system and fermentation in the 1680s and became an *académicien* in 1699.

[40] AD Calvados 1D 991, no. 82, Jacques Brissou de la Terrière, 'An fictitia coma nativa salubrior?' (1705); BL 1180 b 11, no. 1, Etienne Bosc, 'An salinae sanguinis constitutioni, cancri fluviales?' (Avignon, 1713). It can be deduced that Caen had embraced iatromechanism before this date: see below, n. 49.

ILLUSTRATION 12. Pierre Chirac, portrait in oils. Chirac (1648–1732) became professor of medicine at Montpellier in 1687 and later in life was chief physician to both the regent duc d'Orléans and Louis XV (1730–2). Although he published little, he was a famous teacher who did much to promote a dogmatic iatrochemical vision of health and disease, distilled through the prism of the mechanical philosophy.

Cartesian metaphysics which made an unequivocal, substantial distinction between mind and matter. The body qua body was an amalgam of solids and fluids whose natural functions were maintained by the perpetual interaction of the corpuscular particles from which the visible parts were made. The matter of which the body was comprised was inert. It had the capacity to be moved and to resist movement but no power to move itself. The body, then, had been endowed with sufficient motion by God to work as an automaton. The mind or soul was connected in some way with the body in that one could affect the other, but the

mind had no unconscious physiological role.[41] The body was healthy as long as the body's corpuscles retained their optimum shape, motion, and elasticity. Disease, or a malfunctioning of the animal economy (the contemporary term), occurred when the body's natural equilibrium was disturbed. The doctor's task was to identify the cause of the functional disturbance and apply the appropriate remedy. Death was total functional breakdown. It was inevitable because the animal machine was not a perfect mechanism. With age there was a consistent tendency for the parts to clog (for the solids to lose their elasticity, for instance). The physician could patch up the machine but he could not defeat built-in obsolescence.[42]

The iatromechanical model of health and disease was a far cry from the orthodox medical theory of the sixteenth and seventeenth centuries which explained physiological functions in terms of the active power of immanent faculties and qualities. Yet, in important respects, there were significant continuities with an earlier age. The iatromechanists had no new language in which to express their medical doctrine and, confusingly, still deployed the qualitative terminology of their predecessors. There was no mathematization of medical discourse to match the developments in the post-Newtonian physical sciences. More importantly, iatromechanists broadly accepted the Galenic tripartite account of disease. Ill health was recognized through visible signs that had been long established, while it was explained by reference to a proximate and a remote cause, the first internal, the other external and related to one of the traditional non-naturals. In addition, the iatromechanists accepted the customary division of human kind into four main groups, based upon temperament, and continued to uphold the idea that some people were more likely to contract particular diseases than others. Finally, they remained allopathists, advocating the same procedures for curing disease and advising the use of the same remedies as their Galenic forebears. Iatromechanical medicine, therefore, in France at least, was traditional academic medicine wrapped up in a new explanatory suit of clothes.

The first generation of French iatromechanists was also just as quarrelsome as their Galenic predecessors. Adherents of the new medical theory divided into two camps. The majority, represented by leading Montpellier professors such as Chirac and Deidier, believed that the body was primarily a chemical machine.

[41] The relationship between mind and body was of concern to philosophers as well as physicians. In 18th-cent. France it was one of the great debating-points as Cartesian metaphysicians grappled with Locke's assertion that it was not impossible to imagine God superadding the power of thought to matter: see esp. J. W. Yolton, *Locke and French Materialism* (Oxford, 1991).

[42] Many iatromechanist student dissertations discussed the phenomenon of ageing: e.g. Louis-Nicolas Briard, 'An senectus ab occillantium arteriarum duretia?' (Caen, 1762), AD Calvados 1D 987, no. 7.

Although a variety of physiological processes could be explained according to the principles of mechanics or hydrostatics, major processes, such as chylification or secretion, were primarily chemical.[43] As a result, the majority of iatromechanists in the early eighteenth century remained heavily indebted to the chemical physiology of Van Helmont and his followers, although their concept of chemical reactions was founded on a corpuscular theory of matter that they had learnt from Nicolas Lémery and they often eschewed the term 'ferments' in favour of less vitalist ones, like 'dissolution' and 'coagulation'.[44] A minority, on the other hand, led by the Paris physician Philippe Hecquet, refused to have any truck with chemical theories and insisted that all physiological processes could be reduced to simple mechanisms, as Descartes had originally suggested in his *De l'homme* of 1661. Thus, chylification was the result of a process of trituration, whereby masticated food was pummelled, tossed, and ground by the muscular action of the stomach. Similarly, the creation of the glandular fluids could be explained by the sieve-like shape of the glands which only allowed entrance to liquid particles of a certain consistency, while their secretion was attributed to the pressure of muscles surrounding these organs.[45]

The two groups were also divided in their understanding of basic pathology and therapeutics. The 'chemists' tended to embrace a fluidist pathology, tracing the proximate cause of disease to an adverse chemical reaction that had disturbed the equilibrium of the fluids by altering their state. Equilibrium was to be restored by neutralizing the adverse reaction, frequently, although never exclusively, by chemical means. The 'triturationists'[46] in contrast believed that the fluids were homogeneous and subject only to changes in velocity and density, not changes of state, and argued that all disease sprang from a lesion of the solids which damaged their *tonus* or elasticity. For this reason, the triturationists were extremely sceptical about the use of chemical drugs, and they placed their faith instead in phlebotomy. Hecquet, like Gui Patin before him, would have excluded most chemical remedies from the pharmacopoeia. They were poisons

[43] e.g. BFMP MS 5103, Chirac, 'Institutionum medicarum tentamen primum phisiologicum seu de hominis oeconomia', n.d., esp. 305–40, on chylification; Antoine Deidier, *Institutiones medicinae theoricae, phisiologiam et pathologiam complectentes* (Paris, 1731), esp. ch. iv 'De lympha digesta'.

[44] e.g. the dissertation sustained by the chemist and *académicien* Étienne-François Geoffroy in 1704 for entry to the Paris college: 'An omnis morbus a coagulatione', BFMP TMP in fo. ix, no. 1569a. On Van Helmont, Lémery and iatrochemical physiology, see above, Ch. 2, Sect. F.

[45] See Brockliss, 'Philippe Hecquet', 196–201. Hecquet not only encouraged 'triturationist' theses to be sustained in the Paris Faculty, but popularized the doctrine in print: e.g. his *De la Digestion et des maladies de l'estomac suivant le système de la trituration et du broyement* (Paris, 1712). For Descartes's own brief account of chylification, see 'De l'homme', in id., *Œuvres philosophiques*, i. 380–1.

[46] 'Triturationist' is a convenience-label invented by the authors, but 'chemist' or the French *chimiste* would have been used as a term of abuse by opponents of the first group.

which harmed rather than cured. In particular, he was incensed by the use, especially in cases of smallpox, of mineral kermes, an antimony compound invented by Chirac. If one studied the fate of families ravaged by the disease and to whom the emetic had been administered, 'one would say that the plague, or the exterminating angel, had passed through their ranks'.[47]

The two groups defended their corner dogmatically, displaying little charity towards their opponents. Hecquet dismissed physicians and surgeons who embraced the chemical position as venal charlatans, 'attracted to Paris ... by the smell or the smoke of fortune'. Chemists, he declared, travelled by coach while the real physician went on foot.[48] This dogmaticism sprang from the sincerely held belief that their arguments were empirically founded, and that those who denied their claims were rationalist systematizers, wilfully flying in the face of the evidence. In this belief, however, iatromechanists of either stamp were sadly deluded. Although they might claim that their chemical or triturationist explanatory theories were supported by experience, in contrast (in their eyes) to the qualitative arguments of their Galenist forebears, in fact their arguments were not really based on empirical study at all, at least not in the way that Harvey's ideas had been. Iatromechanists might emphasize much more than Galenists the importance of anatomy—the Caen professor Jean-Baptiste Callard de la Ducquerie (d. 1718) called it 'the basis and stay of all medicine'—but there is little sign that the two sides sustained their case from an intimate knowledge of the human or animal body.[49] Indeed, many first-generation iatromechanists remained wedded to the humanist belief that medical progress would come through the study of books not the Book of Nature. Hecquet, for instance, desired the foundation of a medical academy to foster advance in medical practice, but its members would pass their time collating the published

[47] *Le Brigandage de la médecine dans la manière de traiter les petites véroles et les plus grandes maladies par l'émétique, la saignée du pied et le kermes minéral* (Utrecht, 1733), pt. ii, p. 2. The book is a lengthy polemic against the chemists. Hecquet's passion for phlebotomy was satirized by Alain-René Lesage in *Histoire de Gil Blas de Santillane*, ed. R. Laufer (Paris, 1977), where the Paris physician appears as Dr Sangrado (chs. 3–5).

[48] *Brigandage*, pt. i, p. 18. Patin had similarly denounced the Fernelians for their venality. The Jansenist Hecquet was using a well-honed trope of the 16th and 17th cents. that riches and honesty did not go together: cf. above, Ch. 5, Sects. E and F. Ironically, Hecquet himself travelled by coach once his practice was too large to travel by foot! See J. Roger, *Hecquet, docteur régent et ancien doyen de la faculté de médecine de Paris* (Paris, 1889), 124.

[49] Jean-Baptiste Callard de la Ducquerie, 'De anatome' (1696), oration in BM Caen MS 114, p. 135 (collection of family papers). This oration does not overtly demonstrate La Ducquerie's mechanist allegiance, but this is clear from his presidency of later dissertations. Caen, too, then, was embracing iatromechanism in the mid-1690s. The same collection also contains another oration by the Caen professor encapsulating the iatromechanists' vaunted devotion to experience: 'Oratio contra rationem qua probatur experientiae necessitas' (n.d.), ibid. 15–20.

wisdom of the ancients and moderns; new research was only to be undertaken where there were gaps in the therapeutic record.[50]

In the absence of hard empirical evidence, the chemists and triturationists copied a strategy frequently deployed by Descartes himself, when arguing about the internal structure of visible phenomena: they had recourse to analogy. The chemists argued that changes of state *in vivo* were analogous to the transformations effected *in vitro* in acid–alkali reactions: hence their insistence that physicians needed a knowledge of chemistry. The triturationists argued, even more simplistically, that complex physiological processes were akin to crude machines. Thus, food was changed into chyle in the stomach in the same way as a substance was broken up by a mortar with a pestle. They had no effective experiential grounds for maintaining these positions; they were acts of faith. Nevertheless, they were understandable acts of faith in the context of the mechanical philosophy. As mechanists they believed that creation was homogeneous; there was no distinction between inert and living bodies. Equally the behaviour of corpuscles was mirrored in the behaviour of visible forms of matter. The use of analogy as evidence was thus a concomitant of being an iatromechanist.[51]

The bitter division between chemists and triturationists only lasted until the 1730s. Thereafter French iatromechanism became a far less dogmatic and much more eclectic philosophy as its adherents admitted that the mechanism of most physiological processes remained as yet improperly known. The chief influence on the curriculum was now the Dutch medical philosopher Boerhaave, who had developed at Leiden in the first third of the eighteenth century a far more cautious and probabilist iatromechanism than that taught in the French faculties.[52] In this new climate, student dissertations tended to opt for a multicausal explanation of physiological phenomena. In the discussion of chylification, for instance, even the traditional Galenic view that the stomach was an oven in which food was initially broken down by heat was allowed to play a part: witness the Paris thesis sustained by one Louis Pathiot in 1743.[53]

In general, the more tolerant atmosphere from the 1730s reflected the fact

[50] *Brigandage*, pt. ii, pp. 206–17. The member of his mooted academy would publish memoirs which would lay down the laws of medical practice for the future.

[51] Of course, we still have to explain why the iatromechanists divided into two such bitterly hostile camps, and why individuals chose different positions. At present, these questions remain unanswerable. There seems to have been some connection between triturationism and Jansenism: see Brockliss, 'Philippe Hecquet', 219–21.

[52] For a recent account of Boerhaave's iatromechanism, see K. Wellmann, *La Mettrie: Medicine, Philosophy and Enlightenment* (Durham, NC, 1992), ch. 3. La Mettrie, it will be recalled, had gone to study at Leiden (in the early 1730s).

[53] 'An chylus et succus nutricius simili perficiuntur mechanismo?', in G. F. Sigwart (ed.), *Quaestiones medicae Parisienses* (2 vols.; Tubingen, 1759–60), i. 15–21. Other exx. abound; e.g. the dissertation sustained at Caen by Jacques Postel in 1751: 'Theses ex physiologia selectae' (pt. iii), Bibliothèque de l'Arsenal (Paris) MS 824, fos. 241–3.

that medical science was part of a wider scientific culture. The less dogmatic attitude of the second generation of iatromechanists was part and parcel of the Newtonian moment in the physical sciences, which heralded a less aprioristic and more empirical and sceptical approach to natural philosophy.[54] But this was not the sole reason for the change. More specifically, careful physiological and anatomical research inside and outside France, sometimes by figures unconnected with the medical community, effectively established the insufficiency of the triturationist position. Thus, Réaumur's discovery of gastric juice and its solvent effect on food, while studying the digestion of birds, was conclusive proof that chylification was at least in part a chemical process. Equally, the *Recherches anatomiques sur la position des glandes et leur actions* (1752) of the Paris-based Montpellier physician Théophile de Bordeu (1722–76) put the final nail in the coffin of the triturationist theory of glandular secretion. Extremely careful anatomical study revealed incontestably that the space occupied by individual glands could in no way be altered in size, and that in consequence their juices were not released by some form of muscular pressure.[55]

The second generation of iatromechanists therefore, while remaining convinced that creation was homogeneous and a mechanical artefact, wore their mechanist allegiance more lightly. They turned their back on Cartesian analogies in pursuit of hard Lockean facts and placed the moment when medicine would be a perfect science way in the future. This more comfortable form of iatromechanism was given wider currency, somewhat belatedly, through the *Encyclopédie*. When the final volumes were published in 1765, a number of medical articles written by the chevalier de Jaucourt stressed that medical science must be established on a sound theory (i.e. mechanism) but could only develop through painstaking research and a proper experiential knowledge of the physics of the human body. Needless to say, the one contemporary medical philosopher judged by Jaucourt to have laid the foundations for a new medical science was his old professor Boerhaave, who was elevated to the status of a medical icon. Needless to say, too (as this was the *Encyclopédie*), the contemporary state of French medical science was derided. Only in England, where supposedly everyone was trained in the principles of Boerhaave, was medicine said to be flourishing.[56]

In the final decades of the Ancien Régime many members of the medical community, especially members of the Paris college, took this attenuated 'Newtonian' medical philosophy even further. Figures like the Parisian

[54] See above, Sect. A.

[55] Bordeu's work is discussed in E. Haigh, *Xavier Bichat and the Medical Theory of the Eighteenth Century* (*Medical History*, suppl. 4; London, 1984), 32–6.

[56] See esp. *Encyclopédie*, iii. 260–75, art. 'médecine'. Writers for the *Encyclopédie* were notorious for being out of touch with the current state of an art or science.

physician and professor Félix Vicq d'Azyr (1748–94) were no longer interested in articulating an architectonic medical theory at all. Although totally committed to a mechanist explanatory strategy, this third generation of iatromechanists believed that such a theory could only be erected in the future after perhaps centuries of painstaking research. In consequence, Vicq d'Azyr, on the eve of the Revolution, developed a completely new type of course in theoretical medicine, which he taught both privately and eventually in the Faculty's schools, where physiology was taught concurrently with anatomy. Traditionally in the eighteenth century anatomy was treated as a separate ancillary medical science, as it had been in the sixteenth and seventeenth centuries. Vicq in contrast founded each part of his physiology course on an anatomical description of a vital organ. The organ's function would next be explained and accounted for *ex hypothesi*, then the argument supported by a variety of vivisectional experiments.[57] To Vicq d'Azyr, therefore, physiology was no longer an integrated systemic science, but a series of discrete, experiential encounters with different parts of the body. Admittedly, he was not totally against abstract theorizing, but he compared medical science to a pyramid. Its apex consisted of speculative theories which would be continually reconfigured by each generation, while its base was formed by an ever-strengthening sediment of medical fact.[58]

This move towards a more experientally founded physiology found its echo in student dissertations. In the classical iatromechanical era, students offered wide-ranging theses for debate, which would frequently cover the chief aspects of physiology in a couple of pages. In the 1770s and 1780s, conversely, interest switched to exploring in detail particular physiological processes in the light of contemporaneous work in other branches of natural philosophy which had a direct, not an analogous, bearing on the science of the human body. Graduands were no longer interested in erecting even eclectic systems; their gaze was focused on unravelling the significance of hard data, now available in ever-expanding amounts thanks to the prevailing experientialist ethic. Typical was the flurry of interest in the physiology of respiration on the eve of 1789, thanks to the advances in gas chemistry in the 1770s and 1780s which had led to the isolation of oxygen, then known as 'dephlogisticated' or 'eminently respirable air', by Priestley and Lavoisier.[59] Even at Reims (notorious as a faculty where stu-

[57] 'Discours sur l'anatomie: premier discours: plan d'un cours d'anatomie', in *Œuvres de Vicq d'Azyr*, ed. J.-L. Moreau de la Sarthe (6 vols.; Paris, 1805), iv. 35–124. This treatise was written after the outbreak of the Revolution, but purports to reflect Vicq's method of teaching physiology in the 1780s (see p. 124).

[58] 'Discours sur l'anatomie: premier discours: De l'anatomie en général', ibid. iv. 16.

[59] Phlogiston was a substance supposedly given off during combustion and the calcination of metals.

dents could present dissertations originally sustained several decades before) the works of the gas chemists captured the student imagination. Thus in 1788 one Nicolas-Adam Forzy linked respiration and the systolic motion of the heart, by claiming that the purpose of ingesting oxygen into the bloodstream through the lungs was to stimulate the muscles of the heart. This, he argued, could be demonstrated experimentally by vivisection. If a dog's vein-like artery connecting the lungs to the heart were severed, and oxygen blown directly into the organ, the animal would continue to live; on the other hand, injecting fixed air (carbon dioxide) and phlogisticated air (nitrogen) into the bloodstream was lethal.[60]

Yet it must not be thought that the history of medical theory in eighteenth-century France can be written simply in terms of the evolution of iatromechanism from an aprioristic, rationalist dogma into an empirical heuristic device. On the contrary, from the mid-century professors and graduates of the Montpellier Faculty in particular not only distanced themselves from the aggressive, combative doctrines of the first generation of iatromechanists but, in important respects, from iatromechanism *tout court*. If in the first decades of the eighteenth century the corporative medical community was divided between triturationists and chemists, in the period after 1760 they were divided again between sceptical iatromechanists and vitalists.

The vitalist critique of iatromechanism was born in the Prussian university of Halle at the very moment the anti-Galenic Cartesian philosophy was becoming Europe's new medical orthodoxy. Hoffmann's colleague Georg Ernst Stahl (1660–1734) refused to believe that physiology could be explained mechanically. While accepting with the iatromechanists that matter was inert, he insisted that the right functioning of the body was only maintained by the unconscious activity of the soul. Stahlian animism, enunciated to a world beyond the university in the years 1706 to 1708, was first taken up in France by the young Montpellier professor François Boissier de Sauvages (1706–67), who seems to have undergone a conversion experience in 1736. Sauvages's own animist philosophy was developed in his *Elementa physiologiae* (1742) and his ideas were championed by several Montpellier students, notably Bordeu in a 1743 thesis on the history of chylification. Bordeu's investigation into glandular secretion, therefore, was not occasioned principally by his wish to discomfort the triturationists. His target was the dominant iatromechanical ethos, and his own account of glandular

[60] 'An ab aero dephlogisticato cordis motus ac vitae principium?' (1788), BM Reims Printed Books CR II MM 725/5–6, no. 57. This was not the only explanation for the absorption of oxygen; an alternative theory was that oxygen contained a great deal of the substance which manifested itself as heat (caloric); this substance was released into the bloodstream in respiration and retained the body's native heat: see Pierre-Antoine Petit, 'An respirationis et combustionis, eaedem causae, eadem phaenomena?' (1787): ibid., no. 36.

ILLUSTRATION 13. Paul-Joseph Barthez, portrait in oils. Barthez (1734–1806) was a professor at Montpellier from 1761 to 1792, although he spent the last decade of the Ancien Régime in Paris as physician to the duc d'Orléans. In his lectures in the 1760s and 1770s he developed and popularized an idiosyncratic vitalist medical philosophy, which stressed that each organism was unique and maintained by a single vital principle. His ideas were eventually published by his pupil Lordat in 1818.

secretion in 1752 was uncompromisingly vitalist. He was not, though, an animist. According to Bordeu, in a theory in some ways reminiscent of traditional Galenism, each organ was endowed with a vital force which ensured that it func-

tioned in the appropriate way. This force was activated through the irritation of the nerves.[61]

The belief that living matter was not inert but had a mysterious innate faculty of purposeful movement became the hallmark of French vitalism in the three decades before the French Revolution, a period that saw the doctrine in some form or other being taken up in a number of countries.[62] In its most popular form, and as disseminated through the Montpellier Faculty, however, its leading philosopher was not Bordeu but Paul-Joseph Barthez (1734–1806). Until lured to Paris permanently in 1780, Barthez taught his own version of vitalism at Montpellier for two decades and sired a legion of disciples, such as the chemist Jean-Antoine-Claude Chaptal (1756–1832).[63] Essentially Barthez taught that the body contained not a multiplicity of vital forces but one single vital principle. This was both a sensible and motor force, varied in its power from organ to organ, and operated sympathetically so that its activation in one spot could lead to its activation in another.[64] By 1789 vitalists of Barthez's stamp were to be found in most French faculties and students were taking delight in sustaining paradoxical theses which emphasized the limitations of mechanical medicine. One Jean Denise at Caen in 1786, for instance, was even ready to argue that Harvey's discovery of the circulation of the blood had had deleterious consequences for the development of medical science. Denise accepted that the circulation of the blood was a physiological fact that could be investigated through the laws of mechanics and hydrostatics, but insisted that its cause depended on the activation of the vital principle through the irritability of the heart or the vascular system. Mechanical theories were unnatural (a commonplace Enlightenment trope of disparagement). 'How much more beautiful was ... the ignorance of the ancients who relying on genuine observation allowed themselves to

[61] The early history of vitalism in France is best approached through Haigh, *Xavier Bichat*, ch. 2. Controversy rages as to whether Boissier de Sauvages was a committed animist or a sceptical 'Newtonian' iatromechanist *avant la lettre*, who used the concept of an active soul heuristically to account for physiological processes for which mechanical explanations seemed insufficient. Cf. R. French, 'Sickness and the Soul: Stahl, Hoffman [*sic*] and Sauvages on Pathology', and R. J. J. Martin, 'Sauvages: Nosology and Medical Enlightenment in Montpellier'; both in Cunningham and French (eds.), *Medical Enlightenment*.

[62] For vitalism in Europe generally, see F. Duchesneau, *La Physiologie des lumières: Empirisme, modèles et théories* (The Hague, 1982), esp. 1–64, 103–71. Also for a particular study, see R. French, *Robert Whytt, the Soul and Medicine* (London, 1969).

[63] See Jean-Antoine-Claude Chaptal, *Mes Souvenirs*, ed. A. Chaptal (Paris, 1893), 17–21: he followed Barthez's physiological lectures in his second year.

[64] Barthez's vitalism is not easy to penetrate. He published an account of his physiology in his *Nouveaux éléments de la science de l'homme* (Montpellier, 1778), but his ideas are best approached through J. Lordat, *Exposition de la doctrine médicale de P. J. Barthez et mémoires sur la vie de ce médecin* (Paris, 1815). Barthez had students sustain his ideas in their theses: e.g. J. M. G. Grimaud, 'De irritabilitate' (1776), in BFMM Printed Books 275005, vol. vi, no. 2. A secondary study is E. Haigh, 'The Vital Principle of Paul-Joseph Barthez: Clash of Monism and Dualism', *Medical History*, 21 (1977), 1–14.

be led by nature alone ... This irritability, this organic *erectio*, this principle of life must never be confounded with mechanical forces.'[65]

Neither Bordeu nor Barthez were materialists. Had they and their followers been so, then the authorities would never have allowed their ideas to have been published openly or disseminated in the faculties.[66] Both claimed to believe (and there is no reason to doubt their sincerity) in the existence of a separate soul with a will which could influence the body. They just refused to accept that the will could operate subconsciously, as animists like Stahl and Boissier de Sauvages maintained. In this respect, then, they were still Cartesian dualists. There were materialists among French vitalists in the second half of the eighteenth century, notably Diderot, but they were outside the mainstream of the movement and usually outside the medical community.[67] In fact, it would not have suited Barthez's purpose to have argued with Diderot that all matter was potentially alive and that the soul/brain was merely a more complex and vital organ than other parts of the body. The whole thrust of the vitalism of the Montpellier Faculty was to end medicine's traditional dependence on natural philosophy. For a Barthez the physical and life sciences were founded on different principles. Medicine or the science of man was a self-sufficient intellectual enterprise. His position was admirably summed up by his pupil Chaptal:

> [Admittedly], the laws of mechanics, hydraulics, and chemical affinities operate on all of matter; but in the case of the animal economy, they are so completely subordinated to the laws of vitality that their effect is almost nil; and dependent on the intensity of that vitality, so living phenomena distance themselves further and further from the results calculated according to those [physical] laws.[68]

Vitalism's popularity among the French medical community owed much to the obvious inadequacies of iatromechanism. No iatromechanist, for instance, could successfully explain the process of reproduction mechanically. While Galenists had been able to espouse a plausible, if vague, epigenetic theory based on the combined *virtus formatrix* or formative quality inherent in the male and female seed and the facultative power of the womb, the iatromechanists had taken refuge in the theory of *emboîtement* or Chinese boxes. All living creatures had existed in miniscule form from the beginning of time in either the male or

[65] J. F. Denise, 'An detectus ab Harveo sanguinis circuitus ad medicinae progressus fecerit?', 1786, AD Calvados 1D 996, fos. 351–7.

[66] For government censorship in the 18th cent. see above, Ch. 6, Sect. D.

[67] Diderot's ideas are developed in his *De l'interprétation de la nature* (n.p., 1753) and his *Rêve de d'Alembert*, composed 1769 but only published in 1830, where a materialist position is upheld by a fictional Bordeu. Both works are reprinted in D. Diderot, *Œuvres philosophiques*, ed. P. Vernière (Paris, 1964), 177–244, 285–371. The most famous physician materialist in 18th-cent. France was La Mettrie, whose ideas had been developed by the mid-1740s: see Wellmann, *La Mettrie*, esp. chs. 6 and 7.

[68] *Mémoires*, 19–20.

female seed of the first representatives of the species, now referred to as sperms or eggs after the embryological discoveries of the second half of the seventeenth century by experimental philosophers such as Regnier de Graaf and Leeuwenhoek. Reproduction was merely a process of enlargement, not epigenesis. This was hardly a satisfactory theory, however, as even dogmatic iatromechanists realized, for it did not explain the transmission of hereditary features and raised awkward questions about God's role in the creation of monsters.[69]

Iatromechanism's inadequacy, moreover, became increasingly apparent in the light of developments in the life sciences, particularly the growing knowledge of tissue behaviour that stemmed from the eighteenth-century passion for vivisection. Of central importance was Haller's work on irritability, first published in the 1740s. If the Swiss physician was right and all muscular tissue, regardless of the presence of nerves, had the propensity to be stimulated by external pressure, then the complex mechanical explanation of the body's response to such stimulus, based on the release of cerebral fluid through the nerves, was clearly incomplete.[70] Irritability seemed to suggest that organic matter had the power to move itself.[71] Inevitably, the reality of irritability was a central plank in the vitalist critique of the iatromechanical model.[72]

Yet vitalist theories never dominated French medical science in the last decades of the Ancien Régime: the deficiencies in the mechanical model were apparently insufficient to cause physicians to abandon totally the assumptions of their Cartesian predecessors. Indeed, the discovery of irritability fostered a sceptical iatromechanism as much as it provided grist for the vitalist mill.

[69] The standard history of embryology in early modern France is J. Roger, *Les Sciences de la vie dans la pensée française du XVIIIe siècle* (Paris, 1963). For the diffusion and limitations of *emboîtement* theory, see L. W. B. Brockliss, 'The Embryological Revolution in the France of Louis XIV: The Dominance of Ideology', in G. R. Dunstan (ed.), *The Human Embryo: Aristotle and the Arabic and European Traditions* (Exeter, 1990). For the vitalist attack on mechanist embryology, see S. Roe, *Matter, Life and Generation: Eighteenth-Century Embryology and the Haller–Wolff Debate* (Cambridge, 1981); the study refers in part to the ideas of the German vitalist C. F. Wolff (1734–94). It should be pointed out that no one at this date had actually seen the ovarian eggs, only their follicles.

[70] All iatromechanical accounts of bodily reactions to external stimuli are descended from the detailed account of the role of the nerves in Descartes's *De l'homme* (1st pub. Leiden, 1662); see id. *Œuvres philosophiques*, i. 379–480. Triturationists, who placed great emphasis on the role of muscular pressure in explaining many or all of the body's physiological processes, sometimes attributed the conservation of life to the fluids' stimulation of the nerves of the body's internal organs: see esp. Philippe Hecquet, *La Médecine théologique, ou la médecine créée, telle qu'elle se fait voir ici, sortie de la main de Dieu* (Paris, 1733), and his posthumous *La Médecine naturelle* (2 vols.; Paris, 1738).

[71] Haller's discoveries were first enunciated in his *Primae lineae physiologiae in usum praelectionum academicorum* (Göttingen, 1747), then in greater detail in the *Elementa physiologiae* (8 vols.; Lausanne and Berne, 1757–66). Haller later repented his enthusiasm for vivisection.

[72] Admittedly, Haller himself declared that he remained committed to an eclectic iatromechanism in the spirit of his master Boerhaave; partly as a result, he was on bad terms with Bordeu.

Admittedly, some sceptical iatromechanists found Haller's discovery difficult to accept. As late as 1778 the idea was attacked in a dissertation at Caen sustained under the professor Henri-François-Anne Roussel (1748–1812), where it was claimed that experiments intended to demonstrate that insensitive tissues could be irritated were all flawed.[73] Usually, however, iatromechanists were enthusiastic supporters of the Swiss physiologist. Vicq d'Azyr, for instance, believed that Haller was the father of modern (meaning his own) physiology. But Vicq had no truck with vitalism, railing against those who threw out the mechanist baby with the rationalist bath-water. 'Because [dogmatic iatromechanists] have made bad use of [mechanics and physics], should we renounce [these sciences]? And if we are forbidden this abundant source, whence shall we draw our water to irrigate our art and perfect our study of the human body?'[74]

Ultimately, then, why some medical philosophers developed into vitalists rather than sceptical iatromechanists cannot be satisfactorily answered in terms of contemporary developments in physiological knowledge. Rather, the division of medical theorists into two camps has to be seen in the broader context of the Newtonian moment. Vitalists were akin to Newtonians who believed in the reality of attraction and other non-mechanical forces, iatromechanists to Newtonians who treated attraction merely as an unexplained phenomenon. The recognition of this fact, of course, only begs the question as to why the wider world of experimental philosophy as a whole split in two. But this is a problem beyond the scope of this present work, as is the cause of the shift at the turn of the eighteenth century from a qualitative to a mechanical natural philosophy.[75] Suffice it to say that in the particular instance of medical science, the division was encouraged, although not engendered, by the traditional rivalry between Paris and Montpellier, whose long-standing jealousies we have encountered in Part I.[76] It is possible, too, that in the final decades of the Ancien Régime members of the corporative community chose their philosophical allegiance partly on political grounds. Iatromechanism could be represented as very much an 'absolutist' medical theory, where the body was largely controlled by a single centre, the brain; vitalism was the more 'democratic' ideology in that the bodily parts governed themselves.[77]

[73] AD Calvados 1D 987, no. 13, F. V. Morin, 'An a nervis irritibilitas fibrae muscularis?' (1778). Morin was Paris-trained.

[74] 'Discours sur l'anatomie: premier discours', 15. For Vicq d'Azyr's view of Haller, see his 'Plan d'un cours d'anatomie', 35.

[75] Deists and atheists seem to have had no trouble in accepting the reality of a multiple-force universe, so it is possible that the division may mask a deeper split between Christians and unbelievers; this, though, is only a hypothesis.

[76] See above, esp. Ch. 5, Sect. E.

[77] Admittedly, in the mid-18th cent. there is no sign that vitalists were opponents of absolutism. The political views of the Montpellier-educated vitalist Louis de La Caze were definitely

None the less, if the causes of the division need not be pursued at this juncture, it is necessary to unravel further the consequences of the emergence of two distinctive medical philosophies in the decades preceding the French Revolution. As we will see in Section C, the undermining of a dogmatic iatromechanism was of profound significance, not just for the science of physiology, but also for pathology and therapeutics.

C. The Science of Disease on the Eve of the French Revolution

Like their Galenic predecessors, the dogmatic iatromechanists of the first half of the eighteenth century saw medicine as a holistic science in that they believed it possible to render a plausible account of health and the cause and cure of disease within the same explanatory framework. Like many Galenists, too (notably the ultra-rationalist clique led by Gui Patin), dogmatic iatromechanists found their inability to explain a particular empirical fact in terms of their basic principles disturbing. A case in point is the discomfort evinced by the early eighteenth-century Caen professor Jean-François Le Court, when he had to inform his students that he could not readily explain the efficacy of *cortex peruvianus* or quinine in fever therapy. Since Le Court was confident that fever was the result of an acid coagulation of the blood, it followed that, according to the Galenic principle of allopathy, quinine should have been an alkali. This, though, Le Court had to admit did not appear to be the case, for there was no effervescence when the substance was mixed with acids. As a result, the Caen professor tied himself in knots trying to save his basic postulate, by suggesting that quinine might not be a pure alkali but formed from a mixture of alkali salts and earthy particles, which were separated somehow or other on ingestion into the bloodstream, thereby allowing the former to fulfil their neutralizing function.[78]

The abandonment after 1760 of any pretence of being able to offer a complete and coherent mechanical account of physiology finally released pathology and therapeutics from the tyranny of rationalization. Empirical observations about disease and its cure were no longer facts to be accounted for by complex causal narratives about unverified qualitative, chemical, or mechanical changes to the body's solids and fluids. Nor was the status of these facts in any way put into question when the sought-for causal account could not be found. Rather, empirical observations about the body in sickness, as in health, gained a life of their

conservative: see his 'Discours sur la nature et les fondemens de pouvoir politique', in id., *Mélanges de physiques et de morale* (Paris, 1763). For La Caze, see below, Sect. C. It must be emphasized, too, that what definitely divided medical practitioners on the eve of the Revolution into monarchists or democrats was their views on the organization of medicine: 'freemarketeers' or 'boundary-breakers' used democratic ideology to attack any attempt to restrict the right to practise: see below, Conclusion, Sect. B, for the Mesmer affair.

[78] BM Caen MS 476, 'Tractatus de febribus' (n.d.), esp. p. 109.

own; they were something to collect and collate, not to philosophize about or agonize over. In consequence, the final decades of the Ancien Régime saw the sceptics and vitalists redefining the sciences of pathology and therapeutics in novel and distinctive ways.

In the hands of the sceptical iatromechanists pathology was reduced to morbid anatomy. Following the lead given by Giovanni-Battista Morgagni (1682–1771) at Padua, physicians of this school stressed that the aim of pathology was primarily to locate the site of a particular disease through post-mortem dissection, not to locate its cause.[79] Thus, in an account of puerperal fever in a Paris pathological dissertation of 1785, the student Claude-Nicolas Beauvais de Préau (1745–94) was content to connect the disease to an abdominal lesion. Autoptic evidence, he declared, showed that victims of the disease 'manifestly exhibit a milky mass, diffused through the abdominal cavity, by whose presence the condition and consistency of the solid parts of this organ are altered to a greater or less extent'. What had caused the lesion, however, was a matter for pure and hence unrewarding speculation.[80] Vitalists, in contrast, tended to be uninterested even in morbid anatomy, a reflection perhaps of their belief that disease like health was connected with the unknowable vital principle. Barthez was particularly scathing:

> Practical [i.e. pathological] anatomy is useful, but it has many inconveniences. Opening up cadavers only reveals the end-point [*le dernier terme*] of the [internal] effects of the malady, which we were attempting to oppose, and does not allow us to know the first *laesions* that it has made. Often it does not even reveal the end-point.[81]

Instead, vitalists confined the study of disease to the realm of the directly observable: the living patient. In the hands of their most original representatives, narrowing the focus in this way had fecund results. On the one hand, the Montpellier professor Boissier de Sauvages and his followers collapsed the two traditionally separate sciences of pathology, the study of the internal and external causes of disease, and semiotics, the study of its external symptoms, into the new science of nosology or the classification of disease by its outward

[79] Morgagni first published an account of his revolutionary pathological ideas in his *De sedibus et causis morborum per anatomen indagatis* (2 vols.; Venice, 1761).

[80] BFMM Printed Books 275010, vol. vi, no. 42, 'An congestioni abdominali lacteae puerperarum acutae, vulgo febris puerperalis, dictae ipecacuanhae?' (1785). Beauvais de Préau was already a graduate physician of Bourges. The first Paris diss. to claim that the physician need only know the internal site of the disease was sustained in 1776: see BFMP TMP in 4°, xv, no. 96, F. de la Planche, 'An a sola observatione sympathiae doctrina' (p. 16).

[81] BM Montpellier MS 256, Barthez, 'Cours de thérapeutique' (n.d.), fo. 9. Similar worries were raised by the Montpellier graduate Pierre Vigarous in a dissertation sustained as part of a series in 1760 for a vacant chair: see his *Quaestiones medicae 12*, 21–3 Aug. (Montpellier, 1760), Q. 7, 'An theoriae, an vero praxi medicae utiliores sint notiones anatomicae' (pp. 4–5), in BL T 162 (8).

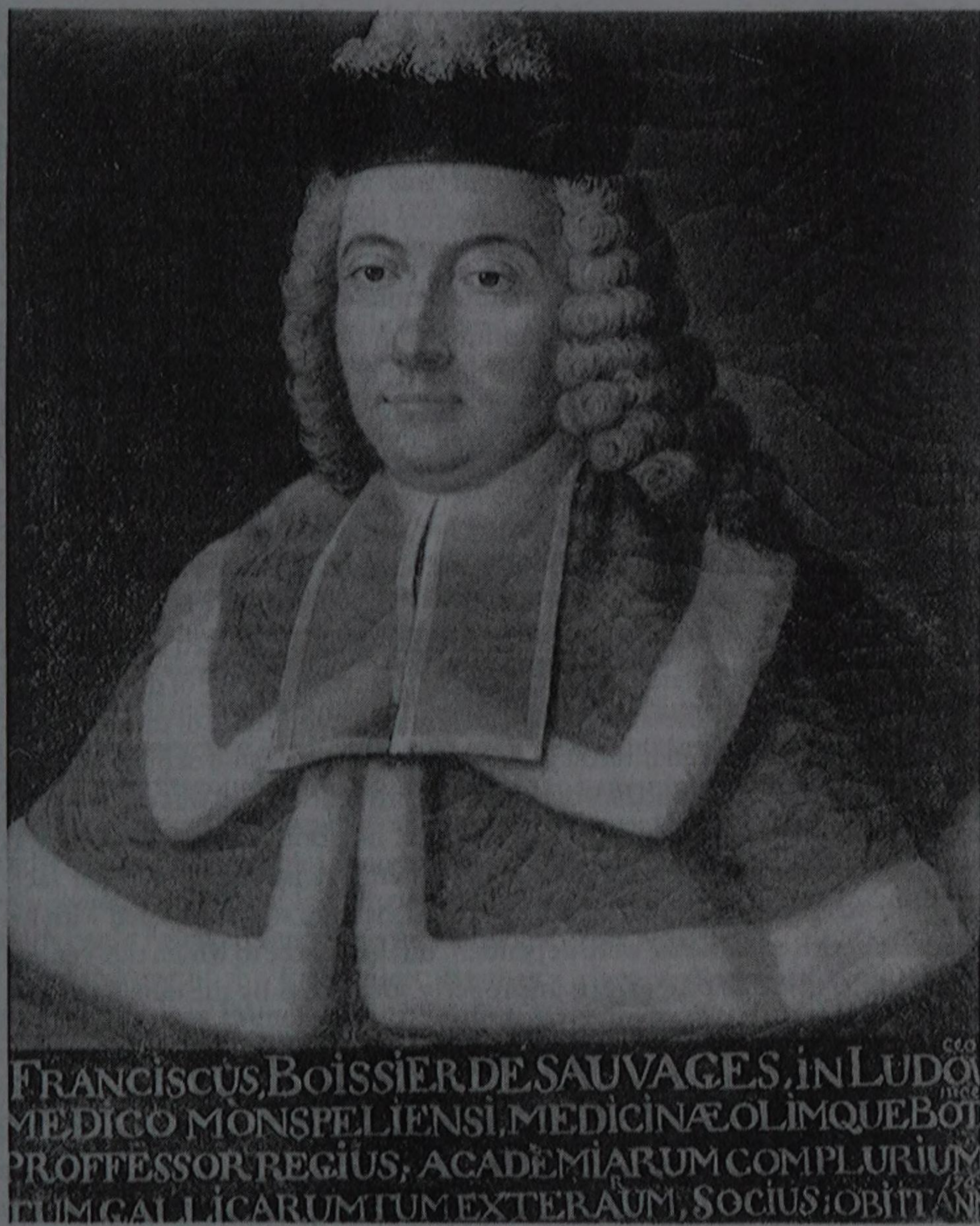


ILLUSTRATION 14. François Boissier de Sauvages, portrait in oils. Boissier de Sauvages (1706–67) was a Montpellier professor from 1734. Refusing to accept the dominant mechanist intellectual ethos of the Faculty, he promoted a theory of health and disease based on the animist ideas of the Halle professor, Stahl. In later years he performed some of the first experiments in electrotherapy. Above all, he is remembered for his work in the classification of diseases which was initially published in rudimentary form in 1731 and in a completed posthumous version under the title *Nosologie méthodique* in 1772.

manifestations. Both Galenists and iatromechanists of all sorts believed that the connection between the internal cause of sickness and the symptoms which expressed the presence of functional breakdown was highly unstable: the organization of symptoms under specific disease heads was a nominalist exercise, of whose shortcomings the good physician was aware.[82] Conversely, vitalists thought that diseases actually existed as discrete species or genera; they were not *ad hoc* labels. Interest, therefore, could be directed towards the scrupulous, comparative study of the outward manifestations of countless individual disease-states, with the intention of compiling from the plethora of data a natural nosology akin to the purportedly natural classificatory systems of contemporary zoologists, such as Linnaeus. Not surprisingly, given the gargantuan nature of the task, Boissier's own nosology took a lifetime to complete. Having initially published a short, programmatic statement of his project in the 1730s, the Montpellier professor was still perfecting his system when he died forty years later, his final statement appearing in the posthumous French translation of his work in 1772.[83]

On the other hand, other Montpellier vitalists, notably Bordeu's uncle Louis de La Caze (1703–65), turned their attention to the remote cause of disease or the environment in which illness was spawned. Under the influence of the new experientialist epistemology, an interest in the environment as a source of disease was a commonplace in the second half of the eighteenth century and was certainly not an exclusive concern of vitalists.[84] But La Caze, like Boissier de Sauvages, was not just interested in collecting data out of an empiricist conviction that fact-gathering was good *per se*. Rather, his environmentalism was connected with his belief that health and disease were dependent on the degree to which the 'centres of life' (his term) were properly or improperly stimulated by the outside world. Individuals had to learn what was the appropriate economic, social, and cultural environment in which to live. Since individuals, however, could not always inhabit their optimum environment, more was needed than medical counselling. The maximization of the people's health became a political concern.[85]

In the hands of iatromechanist sceptics and vitalists, then, pathology divided into a number of discrete studies. Therapeutics, in contrast, retained its

[82] See above, Ch. 2, Sect. C.

[83] *Nosologie méthodique ou distribution des maladies en classes, en genres, et en espèces* (10 vols.; Lyons, 1772). Boissier de Sauvages gained a chair at Montpellier in 1734. A vitalist outside France to take an interest in nosology was the Scottish physician William Cullen.

[84] See below, Sect. E.

[85] La Caze outlined his system in several works, esp. his *Idée de l'homme physique et morale* (Paris, 1755). We are indebted to the late Roselyne Rey of the Centre d'Alexandre Koyré, Paris, for introducing us to this work. See her 'Vitalism, Disease and Society', in R. S. Porter (ed.), *Medicine in the Enlightenment* (Amsterdam, 1995), esp. 276–8. La Caze was physician to the duc d'Orléans and based in Paris; he never held a Montpellier chair.

integrity, but it changed from being a causal into an empirical science. Professors were no longer interested in explaining how or why a drug worked but assessing its efficacy experientially. Disenchantment with traditional attempts to explain the action of particular drugs was clearly displayed in the 1765 article 'médicament' in the *Encyclopédie*. According to its author, the Montpellier professor Gabriel-François Venel (1723–75): '[E]verything that medical theory has established in this regard is absolutely null and void; it is only mere jargon.' But Venel, for all his scepticism, still hoped that a water-tight explanation as to why drugs worked would eventually be found. If he declared that 'physicians have no other source of knowledge as to their action ... than empirical observation', it was only because the key to the mystery, chemical analysis, his own scientific passion, had not yet been perfected.[86]

Barthez's position was very different. In the therapeutics course that he gave at Montpellier in the 1760s and 1770s, he maintained that it was impossible to explain how drugs operated on the body. Therapeutics, as a result, should be a purely observational science directed towards a fuller understanding of the efficacy of different medicaments. At present there was little real knowledge about which drugs worked and which did not. There was a need, therefore, for the European medical community to build up an extensive database, which would permit the practice of medicine to become something more than a game of chance. Admittedly, it would be impossible to guarantee success, for 'it happens that in the same circumstances and the same disease the principle of life [i.e. the individual vital principle] chooses to operate in different ways [*prend des déterminations différentes*]'. Nevertheless, with enough information therapeutic decisions could be taken according to the laws of probability.[87]

On the eve of the Revolution, Barthez's view of therapeutics was widely accepted among French faculty professors. Admittedly, he had some opponents—his Montpellier colleague Jean-Baptiste-Timothée Baumès (1756–1828), for one, who shared Venel's optimism in the potential value of chemistry for unlocking medicine's mysteries.[88] But most professorial accounts of the cure of particular diseases took their cue from Barthez's general approach. Thus another Montpellier colleague, François Broussonet, lecturing on venereal diseases in 1785, admitted complete ignorance as to how mercury acted in their

[86] *Encyclopédie*, x. 295–6. Venel graduated at Montpellier in 1742 and gained a faculty chair in 1758; he was the country's foremost mid-18th-cent. chemist, although he did not teach his expertise publicly. His medical philosophy was clearly more sceptical than Jaucourt's and emphasizes that the *Encyclopédie* embraced more than one medical position.

[87] 'Cours de thérapeutique', BM Montpellier, MS 256, fos. 1–27 (esp. fo. 23). Barthez believed practitioners should be conversant with mathematics (fo. 20).

[88] Personal communication of Agustì Nieto-Galan of the Univ. of Barcelona, who is working on the relations between Montpellier and Barcelona at the turn of the 19th cent. Baumès gained a chair at Montpellier in 1790.

cure. As a good vitalist he simply concluded that mercurial rubs merely helped nature to help herself.[89] What interested him was not the reasons the cure was successful but the preparation of the patient and the methods of alleviating the worst side-effects of the treatment. Throughout his exposition his emphasis was always on whether a particular strategy worked: he was unimpressed, for instance, with the custom of placing gold leaf in the mouth to check a stubborn salivation because there was so little evidence the action brought any relief.[90]

Students adopted the observationalist bias of their professors. Therapeutic dissertations in the 1770s and 1780s continually promoted the use of remedies on the strength of their efficacy alone, remedies too whose use was relatively novel in France and whose wondrous effects can only have been known by report. Typical was the dissertation sustained by one Jacques-Gabriel Chibourg (1761–1828) at Caen in 1788 in support of the oriental caustic moxa. This was a remedy, Chibourg admitted, that had been laughed out of court in the mechanist era, and no one understood its operation, 'whether it was mechanical or chemical'. None the less, it had been promoted over the past century by a number of *clinici* (i.e. observationally orientated) physicians, including the Englishman Thomas Sydenham, as a cure for smallpox and other ills, and this was grounds enough to advocate its use.[91]

But if therapeutics became a purely observationally based science that in Barthez's eyes had to be 'revolutionized' (his term) and created afresh,[92] this did not mean that the art of practical therapy was to be reduced to a game of trial and error.[93] Even in the last decades of the Ancien Régime, the strategic basis of Galenic therapeutics was still held to obtain. Medical practitioners were always to proceed cautiously, beginning wherever possible with mild remedies, and helping nature to heal itself.[94] Devotees of the new therapeutics urged much greater caution than their immediate predecessors. Dogmatic iatromechanists, especially chemists like Chirac, had poured scorn on the ancients' belief in crises and critical days, and encouraged physicians to attack the disease from the outset. Sceptics and vitalists were far less sure that their classical forebears had

[89] BM Montpellier MS 257, pt. vii, Broussonet, 'Tractatus de morbis venereis', 1785, fos. 479–81. Broussonet had gained a chair at Montpellier in 1778.

[90] Ibid., fo. 494. The gold leaf was supposed to attract the mercury. This must have been a new practice. In the mid-17th cent. Lazare Riverius had used gold leaf as a diagnostic, to see if the patient's head was full of mercury: see above, Ch. 5, Sect. C.

[91] 'An prae coeteris vesicantium et rubefacientium generibus moxa?' (1788), AD Calvados 1D 985, no. 9. *Clinici* was the common term for proponents of an observationalist therapeutics.

[92] Barthez, 'Cours de thérapeutique', BM Montpellier MS 256, fos. 24–5.

[93] An unregulated empirical medical practice was always frowned upon: e.g. the anonymous Paris thesis of 1777, 'An remediorum, etiam empiricorum, adhibitio dogmatica?', BFMP TMP in 4°, xvi, no. 107.

[94] Significantly Barthez argued that Galen's *Methodus Medendi* was one of the few books on therapeutics worth reading. See BM Montpellier MS 256, fo. 5.

erred in delaying treatment until nature showed her hand, and once more began to talk of the need to wait on events, if they remained doubtful that diseases came to a head on designated days.[95] Practitioners, then, were to observe their patients with extraordinary care and do nothing to anticipate or promote nature's own healing process.

Indeed, the new therapeutic culture, far from encouraging a gung-ho interventionist medical practice, commanded exceptional restraint. Practitioners were not just to bide their time before administering their therapies, but as much as possible they should avoid medical intervention altogether. According to the Montpellier-trained Jean-Emmanuel Gilibert (1741–1814), medical aid was needed in far fewer cases than traditionally thought:

> It is necessary to await patiently until Nature gives the signal; one should never dream of [using] remedies before she has spoken in a decisive manner. It is rare that she summons them in acute diseases, and in chronic ills she demands only remedies, which are selected then continued with patience.[96]

Practitioners, then, had to practise what Gilibert and his contemporaries called 'une médecine expectative', an expectant medicine, that had been supposedly initially founded by Hippocrates but gradually forgotten by his successors.[97] Even in the recent past, Gilibert argued, practitioners had been guilty of placing the emphasis on art not nature, and in consequence of harming their patients rather than helping them. This was particularly the case in smallpox therapy, where the traditional approach had been to incarcerate the patient in a hot room, smother the victim with blankets, and drown the invalid in hot potions. The result was that far from promoting benign pustules, the patient developed gangrenous ones all over the body.[98]

Clearly, in the last decades of the Ancien Régime the science of disease had been significantly redefined. Even more than physiology, pathology and therapeutics had been reinvented as primarily observational sciences. Therapeutics had become a completely independent medical science, while pathology only retained its linkage with physiology to the extent that the direction of the observer's gaze, towards the outside or inside of the body, was dependent on his wider philosophical allegiance. This new science of disease,

[95] For a good discussion of the changing attitude towards crises and critical days in the mid-18th cent., see *Encyclopédie*, iv. 472–89, art. 'crises' by the vitalist Bordeu.

[96] *L'Anarchie médicinale ou la médecine considérée comme nuisible à la société* (3 vols.; Neuchâtel, 1772), i. 216. This work was an extremely discursive popularization of the new medical philosophy of the Newtonian moment.

[97] Ibid. 200–3.

[98] Ibid. 215. The approved new treatment for smallpox was a cooling regime: see below, Ch. 9, Sect. B.

it must be emphasized, was more than a theoretical construct. All over France on the eve of the French Revolution physicians trained in the new medical culture were filling their notebooks with observations about their patients' diseases and the treatment proffered, if less frequently in private practice recording the findings of post-mortem dissection.[99] Many, too, were experimenting with new therapies, such as the Paris physician Nicolas Chambon de Montaux (1748–1828), who spent the summer of 1782 in the spa town of Bourbonne-les-Bains comparing the relative merits of mineral-water therapy and electrical stimulation in cases of paraplegia.[100] Admittedly, by 1789 few accounts of the observations and investigations of the nation's *clinici* had been published. But in the 1780s there already existed a new institution, the Royal Society of Medicine, where their work could be reported, discussed, and validated. Founded in 1778 through the efforts of Vicq d'Azyr, it brought together under one institutional umbrella the physicians at the cutting-edge of Barthez's medical revolution, uniting a hard core of Parisian enthusiasts with a hundred of their provincial colleagues.[101]

As a result the physicians' professional role was beginning to change. Under the impact of the new medical culture the physician-practitioner was gaining an additional identity as the physician-scientist. In a world where medical science was built on empirical fact, knowledge creation was no longer just the prerogative of the faculty professor. All practitioners were potential scientific outworkers.[102] Yet, this was not the only change that had occurred to the learned physician's traditional role in the course of the eighteenth century. As the following sections will show, the physician was also being called upon to have a much higher profile as a medical practitioner.

[99] Patients' families remained unwilling to permit autopsies as a matter of course. Cf. the comments in Louis Lépecq de la Cloture, *Observations sur les maladies épidémiques, ouvrage rédigé d'après le tableau des épidémies d'Hippocrate, et dans lequel on indique la meilleure méthode d'observer ce genre de maladies* (Paris, 1776), 185, on the problems of dissecting epidemic victims; for this publication, see below, Sect. D. Dissections were even difficult of hospital patients because of the need to respect the susceptibilities of protective administrators and suspicious sisters of charity, both of which groups were opposed to physicians using inmates as medical guinea-pigs: see below, Ch. 11, Sect. D.

[100] See his manuscript memorandum in BFMP MS 5143, no. 19, 'Observations sur les résultats heureux de l'électricité combinés avec l'usage des eaux thermales salines, d'après les expériences faites en 1782 à Bourbonne les Bains'. Electrotherapy and other new cures are discussed below, Ch. 9, Sect. B. It seems to have been first experimented with by Boissier de Sauvages: see L. Dulieu, 'François Boissier de Sauvages, 1706–1777', *Revue d'histoire des sciences*, 22 (1969), 310–11.

[101] For a full discussion of the foundation and activities of the Royal Society of Medicine, see below, Ch. 12, Sects. D and E.

[102] Of course, there had always been physicians who were not professors involved in the construction of medical science in the 16th and 17th cents., but it had never been expected that most private practitioners would make a positive contribution.

D. The Expansion of the Medicable

However much the dogmatic iatromechanism of the first decades of the eighteenth century might have been refined in the last fifty years of the Ancien Régime, medical philosophy throughout the period 1680–1790 possessed an underlying unity based on a belief in medical progress. Unlike the Galenists of the sixteenth and seventeenth centuries, iatromechanists and vitalists were optimists. Whereas the Galenists had believed that the fundamentals of medical science had been laid down by the ancients and that their primary task was to recapture or refine the classical inheritance, their successors emphasized the need to build medical knowledge afresh. This did not mean that iatromechanists and vitalists rejected the classical medical inheritance entirely. Indeed, to the extent that the eighteenth century turned Hippocrates into a medical hero who had created an enlightened observationalist medical science *avant la lettre*, medical philosophers were clearly anxious to locate their endeavours in a classical past, albeit a pre-Galenic one.[103] It did mean, however, that there was a new emphasis on studying mankind in health and disease with an open mind. It meant too, that whereas the Galenists attributed medical failure to the hidden hand of God, eighteenth-century medical theorists attributed failure to inadequate knowledge, and believed that the creation of a new medical science would reap practical dividends. In this respect the iatromechanists and vitalists had much in common with the Paracelsians of an earlier age who challenged the prevailing Galenic orthodoxy on the grounds that the criterion of medical truth was therapeutic success.[104]

The sense of optimism that pervaded eighteenth-century French medical theory was a European commonplace. It obviously reflected the contemporary Enlightenment belief that once man and his environment were properly understood, the status quo in all its guises could be effectively challenged. One of the chief characteristics of the Enlightenment was a conviction that change was both possible and desirable. Another characteristic, sometimes more honoured in the breach than the observance, was a belief in human equality, a belief summed up in the assertion of the American Declaration of Independence that all men had inalienable right to life, liberty, and the pursuit of happiness. Inevitably, Enlightenment egalitarianism also had an effect on medical science. Its effect was displayed in the zeal shown by eighteenth-century medical theorists in France and elsewhere to expand the field of corporative medical practice into hitherto neglected areas.

[103] Cf. the account of the history of medical science given by Jaucourt in *Encyclopédie*, x, art. 'médecine', esp. 266–7. On Hippocrates' influence as a medical icon in this period, see below, Sect. E.

[104] See above, Ch. 2, Sect. D.

In sixteenth- and seventeenth-century France the field of practice of the learned physician was confined socially and spatially: the poor of the town and countryside especially were largely ignored, and the constituency of the learned practitioner was the social and urban élite.[105] But even within that constituency the physician's role was restricted from a modern perspective. In the first place, although physicians expected to attend patients suffering from epidemic as well as chronic diseases (witness the number of theses dedicated to dysentery and fevers), most seem to have avoided consulting in cases of plague and similar highly contagious maladies.[106] Secondly, while physicians treated all members of affluent families—young and old, male and female—they showed a limited interest in age- or gender-specific diseases. In particular, they all but ignored problems surrounding pregnancy, childbirth, weaning, and infant development, interesting themselves in infertility and complicated deliveries,[107] but leaving routine gynaecological and paediatric complaints to midwives and surgeons.[108] Thirdly, even within the field of chronic diseases, there were several maladies in which physicians took a limited interest. The most obvious were venereal diseases, which had largely become the preserve of surgeons.[109] But two other wider categories were physical disabilities and mental disorders. Physicians might take some interest in paralysis which resulted from apoplexy, but most forms of sensory deprivation or hereditary or accidental physical disability (loss of a limb, for instance) were dealt with, if at all, by surgeons.[110] Similarly, physicians might claim to be competent to distinguish between the natural or

[105] See above, Ch. 5, Sect. A.

[106] For their reluctance to treat the plague, see above, Ch. 6, Sect. A.

[107] Infertile queens were sent to 'take the waters'. In 1580 Henry III and his wife went to the spa at Bourbon-Lancy: see Jean Aubéri, *Les Bains de Bourbon-Lancy et Larchambaut* (Paris, 1605), 55r. Throughout the 17th and 18th cents. Balaruc on the Mediterranean coast had a reputation for curing infertility.

[108] Cf. the limited range of the ailments of women and children discussed in Lazare Riverius, *Observationes medicae et curationes insignes quibus accesserunt observationes ab aliis communicatae* (Paris, 1646). This unique source is referred to continually above, Ch. 5, Sect. C. Riverius's casebook gives many examples of female and child patients who were treated for fevers, but there is no evidence he was interested in gynaecology. Hence obstetrical works in the late 16th and 17th cents. were primarily written by the Paris surgeons of Saint-Côme, such as Jacques Guillemeau, author of *De l'heureux accouchement des femmes* (Paris, 1609), printed in his *Les Œuvres de chirurgie* (Rouen, 1649), as 'Le Gouvernement de la femme enceinte', 257–386. Guillemeau also wrote on the nourishment and government of children. For the general insouciance towards high levels of infant and maternal morbidity, see above, Ch. 1, Sect. C.

[109] See above, Ch. 5, Sect. D.

[110] As amputation became a relatively common operation, artisans, notably clockmakers and locksmiths, were asked to design artificial limbs: see the illustrations in Ambroise Paré, *Les Œuvres* (10th edn., Lyons, 1641), 579–83 (from his 'Livre traictant des moyens d'adiouster ce qui defaut naturellement, ou par accident'). For an account of prosthesis in the period, see R. Benhamou, 'The Artificial Limb in Pre-Industrial France', *Technology and Culture*, 35 (1994), 835–45. By the end of the Ancien Régime, advertisements for artificial limbs were carried in the press.

supernatural provenance of mental disturbances, but they were seldom concerned in their treatment.[111]

In the sixteenth century the mad were seen as moral symbols, not as subjects for medical care: to some madness was a sign of intrinsic human depravity; to others it was a metaphor of divine wisdom, a higher form of reason. In the seventeenth century madness became associated with irrationality and the improper use of the will. The mad came to be viewed as socially dangerous animals who had to be excluded from human society. Consequently, from the mid-seventeenth century, they were locked away in the new *hôpitaux généraux* along with all the other manifestations of disorder and unreason: beggars, prostitutes, blasphemers, and so on. Madness was still not deemed a disease, but a moral failing, and the mad were categorized according to their relative threat to society; thus, the 'furious' were dangerous and needed chaining up like animals, while the 'demented' were manageable but dim. Interned usually without any medical examination, the mad were invariably left to rot. If a physician (or surgeon) was paid to visit a town's *hôpital général*, it was not to treat insanity but to deal with the epidemic diseases that the inmates were inevitably prone to.[112]

In the eighteenth century, in contrast, medical theorists increasingly emphasized that the subject of medical practice was everyman or woman and its province the gamut of disease. Enlightenment humanitarianism combined with the new-found confidence in the practical possibilities of medical science to create a new conception of the physician's constituency which was no longer class- or even eventually species-specific, and took due note of ailments peculiar to a particular section of the population or traditionally left to surgeons. The eighteenth century, too, saw physicians make the first attempts to extend the scope of the medicable, by asserting a medical interest in psychological disorders hitherto thought largely beyond the physician's range of interest. Only the disabled remained of little concern to physicians before the Revolution, if they did show a limited interest in child deformities. Although some *philosophes* were fascinated by sense deprivation, it was clerics and lay philanthropists, not physicians, who initially interested themselves in the task of socializing the deaf and blind, notably the abbé Charles Michel de l'Épée (1712–89) who founded a

[111] Physicians were called in by the Crown and the Church to give their opinion on possession cases: e.g. the case of Marthe Brossier in 1599, who was condemned as a fraud after being seen by a team of Paris physicians: see esp. R. Mandrou, *Magistrats et sorciers en France au XVIIe siècle: une analyse de psychologie historique* (Paris, 1968), 161–79.

[112] The fullest account remains M. Foucault, *Folie et déraison: Histoire de la folie à l'âge classique* (2nd edn., Paris, 1972), pt. i, a compelling and sensitive work on which we have largely drawn. For the establishment of the *hôpitaux généraux*, see below Ch. 11, Sect. B. Occasionally a 17th-cent. physician did take a closer interest in madness: e.g. the Englishman Richard Napier, whose work is discussed in M. MacDonald, *Mystical Bedlam: Madness, Anxiety and Healing in Seventeenth-Century England* (Cambridge, 1981).

school for the deaf in 1755, and the bureaucrat Valentin Haüy (1745–1822) who established another for the blind in 1785.[113] Equally, it was surgeons, as we will see, who took the lead in providing medical aid in certain forms of disability.[114]

The physicians' growing interest in psychological disorders can be traced to the turn of the eighteenth century and their changing attitude to hysteria. In the form of religious ecstasy hysteria had traditionally been considered a divine or diabolic gift and hence the province of the Church; only in the form of the vapours had it been treated as a physical disease, one primarily based on the physical effects of the wandering uterus. For various reasons—too much or too little sex, for instance—the uterus was thought to be able to travel upwards and put pressure on the gastric region. From the beginning of the eighteenth century, in contrast, all forms of hysteria tended to be seen as the physical manifestations of a specifically mental derangement. Hysteria was henceforth deemed to be a third form of madness, distinguished by medical writers from dementia (or total irrationality) and melancholy and mania (or passive or aggressive obsession).[115]

As a mental disorder hysteria was now classed as a nervous disease. Inevitably, in the first half of the eighteenth century iatromechanist physicians offered highly complex and conflicting accounts of its internal cause, but throughout the century all were agreed that hysteria could usually be ultimately traced to an emotional disturbance. For this reason, one of the first Frenchmen to take a serious interest in the affliction, the Montpellier professor Chirac, insisted that it was necessary initially to discover and alleviate the sickness in the mind, if the patient was to be returned to physical health. Treating the symptoms alone was of minimal use. 'It is to pretend to have caused a river to dry up without cutting it off and rerouting it from its sources.'[116] Chirac, therefore, refused to treat hys-

[113] Diderot, above all, was fascinated by sensory deprivation, as he realized the blind especially offered the chance of investigating empirically whether knowledge was innate or derived through the senses. See W. R. Paulsen, *Enlightenment, Romanticism and the Blind in France* (London, 1980). For early attempts to 'socialize' the blind and deaf, see D. B. Weiner, *The Citizen-Patient in Revolutionary and Imperial Paris* (Baltimore, 1993), ch. 8.

[114] As befitted an age of observation, eye-surgery made important advances in the 18th cent.: see below, Ch. 9, Sect. A.

[115] For an overview of the changing conception of hysteria, see G. Rousseau, '"A Strange Pathology": Hysteria in the Early Modern World 1500–1800', in S. L. Gilman *et al.*, *Hysteria Beyond Freud* (London, 1993). For the redefinition of religious ecstasy as a disease in 18th-cent. France and the century's obsession with the vapours, see L. Wilson, *Women and Medicine in the French Enlightenment: The Debate over* Maladies des Femmes (Baltimore, 1993), esp. chs. 1 and 6. Also, Foucault, *Folie*, 269–315, for medical categories of madness.

[116] Library of the College of Physicians, Philadelphia, MS 10a 183, Chirac's medical casebook *c.*1700 (a collection of consultations transcribed by an English student, Cuthbert Constable), p. 135 (from the case of Mme de Beaumont of Apt). Chirac claimed to have a great knowledge of the vapours.

terics with drugs, and sought a solution to their malady in exercise, company, and an occupied mind.[117]

Success in treating hysteria inevitably led some enlightened physicians to extend their attention beyond the palpitations of the polite to the much more distressing behaviour of the mentally disturbed. The well-to-do who were willing to risk the social embarrassment of keeping the deranged in the family home could now find physicians ready to undertake their treatment. Even the mad who were locked away as beyond redemption ultimately found their medical champions. Although the government and most of high society in the Age of the Enlightenment remained content that the mad once incarcerated should be forgotten, several French physicians by the end of the Ancien Régime, notably the Paris graduates Jean Colombier (1736–89) and François Doublet (1751–95), were certain that their condition could still be improved.[118] They accepted that the seriously deranged had to be locked away but they believed that, once interned, an attempt should be made to cure them before abandoning them altogether. Treatment, however, was judged impossible where the mad were incarcerated indiscriminately with other social undesirables, so Colombier and Doublet concluded that the institutionalized mentally ill should henceforth be looked after in a special building.[119] Such medical concern for the incarcerated mad, however, was still unusual on the eve of the Revolution. It must be said, too, that Colombier and Doublet had no new view on how the new 'mental patient' should be treated: they continued to promote the usual round of bleedings, purgings, and cold baths that their colleagues used on the less seriously afflicted.[120] The first significant steps by physicians towards the 'medicalization' of the seriously deranged would only come in the 1790s with the work of Philippe Pinel (1745–1826) and his colleagues at Bicêtre and the Salpêtrière hospitals in Paris.[121]

An interest in becoming involved in areas of élite medical practice traditionally left to surgeons can also be traced to the early eighteenth century. On the one hand, physicians were encouraged to play a more active role in the cure of venereal diseases, while surgeons were attacked for dealing illegally with an internal

[117] Jean Astruc, in contrast, did advocate drugs (see his consultation for Mme de Calabre, ibid. 401–7).

[118] They were the authors of *Instruction sur la manière de gouverner les insensés et de travailler à leur guérison dans les asyles qui leur sont destinés* (Paris, 1785).

[119] Foucault, *Folie*, pt. iii, esp. chs. 2–3. By this date the disorderly were no longer thrown pell-mell into the *hôpitaux généraux*: locking up the poor, according to the physiocrats, was economically wasteful.

[120] The standard treatments are discussed in Foucault, *Folie*, pt. ii, ch. 4. More imaginative cures were being tried in the course of the 18th cent., but by the Frères de la Charité who looked after the incarcerated insane, not by the physicians: see below, Ch. 11, Sect. D.

[121] See Weiner, *Citizen-Patient*, ch. 9.

malady and their therapeutic efforts castigated as inadequate.[122] On the other hand, physicians for the first time were taught to take an interest in diseases specific to children and women.[123] Responding to but also helping to create the new concept of the affective 'bourgeois' family, physician-philosophers reinvented themselves as family physicians.[124]

The most important representative among the first generation of iatromechanists to champion a wider field of medical practice among the families of the nation's élite was the Montpellier and later Paris professor Jean Astruc. His thoughts on venereal therapy need not detain us, save to say that he was an ardent defender of the use of conventional mercurial rubs and poured scorn on the purported success of the many mercurial and non-mercurial specifics invented and marketed by contemporary surgeons and empirics.[125] His novel thoughts, however, on the physician's role in the boudoir and the nursery require closer discussion.

Teaching at the Paris Collège Royal in the 1730s and 1740s, Astruc used his lectures to promote his commitment to the new concept of the family physician by frequently giving courses on child and female diseases in the vernacular.[126] These were quickly published in pirated English translations, although Astruc only ever committed his thoughts on female diseases to print, and then not before the end of his life.[127] In Astruc's view there was no problem about the

[122] In the 1730s the physicians attempted to get the public to accept their right to police the treatment of venereal maladies in a series of pamphlets denouncing the surgeons; these were duly answered. e.g. [A Paris physician], *Question de médecine, dans laquelle on examine, si c'est aux médecins qu'il appartient de traiter les maladies vénériennes, & si la sûreté publique exige que ce soient des médecins qui se chargent de la cure de ces maladies* (Paris, 1735); and [Jean-Louis Petit, Paris surgeon], *Second Mémoire pour les chirurgiens* (Paris, 1737); both in BL 551 d 2 (4, 6); this collection contains a number of pamphlets by the two sides. See also Philippe Hecquet, *Le Brigandage de la chirurgie, où la médecine opprimée par le brigandage de la chirurgie* (Utrecht, 1738), 70–5.

[123] But not in the diseases of the elderly. Although old age became a subject of growing interest as the century progressed, there was little specific attention paid to geriatric medicine before the Revolution. The first physician to devote a complete work to the diseases of the old was the Paris graduate M. J. C. Robert, *De la vieillesse* (Paris, 1777). Details in D. G. Troyansky, *Old Age in the Old Regime: Image and Experience in Eighteenth-Century France* (Ithaca, NY, 1989), esp. ch. 5.

[124] For the new interest in children's diseases, see the brief account in J. L. Biraben, 'Le Médecin et l'enfant au XVIIIe siècle (Aperçu sur la pédiatrie au XVIIIe siècle)', *Annales de démographie historique*, 10 (1973), 215–23. On the emergence of the bourgeois family, see R. Pillorget, *La Tige et le rameau: Familles anglaise et française XVIe–XVIIIe siècle* (Paris, 1979), esp. ch. 7.

[125] Astruc, *De morbis venereis libri sex*, esp. 545–64, the bibliographical section. Astruc intended this book to be read by physicians; hence it was not written in Latin simply out of a fear lest its subject-matter offend the tender conscience: see above, n. 26.

[126] Exx. of his course on female diseases survive: see Wellcome Institute for the History of Medicine Library, London, MS 1008, 1010–11. Astruc, interestingly, also gave a course on geriatric diseases, though how frequently is not known: see F. D. Zeman, 'Jean Astruc (1684–1766) on Old Age', *Journal of the History of Medicine and Allied Sciences*, 20 (1965), 52–7.

[127] *Traité des maladies des femmes* (6 vols.; Paris, 1761–5). The publication of his course was

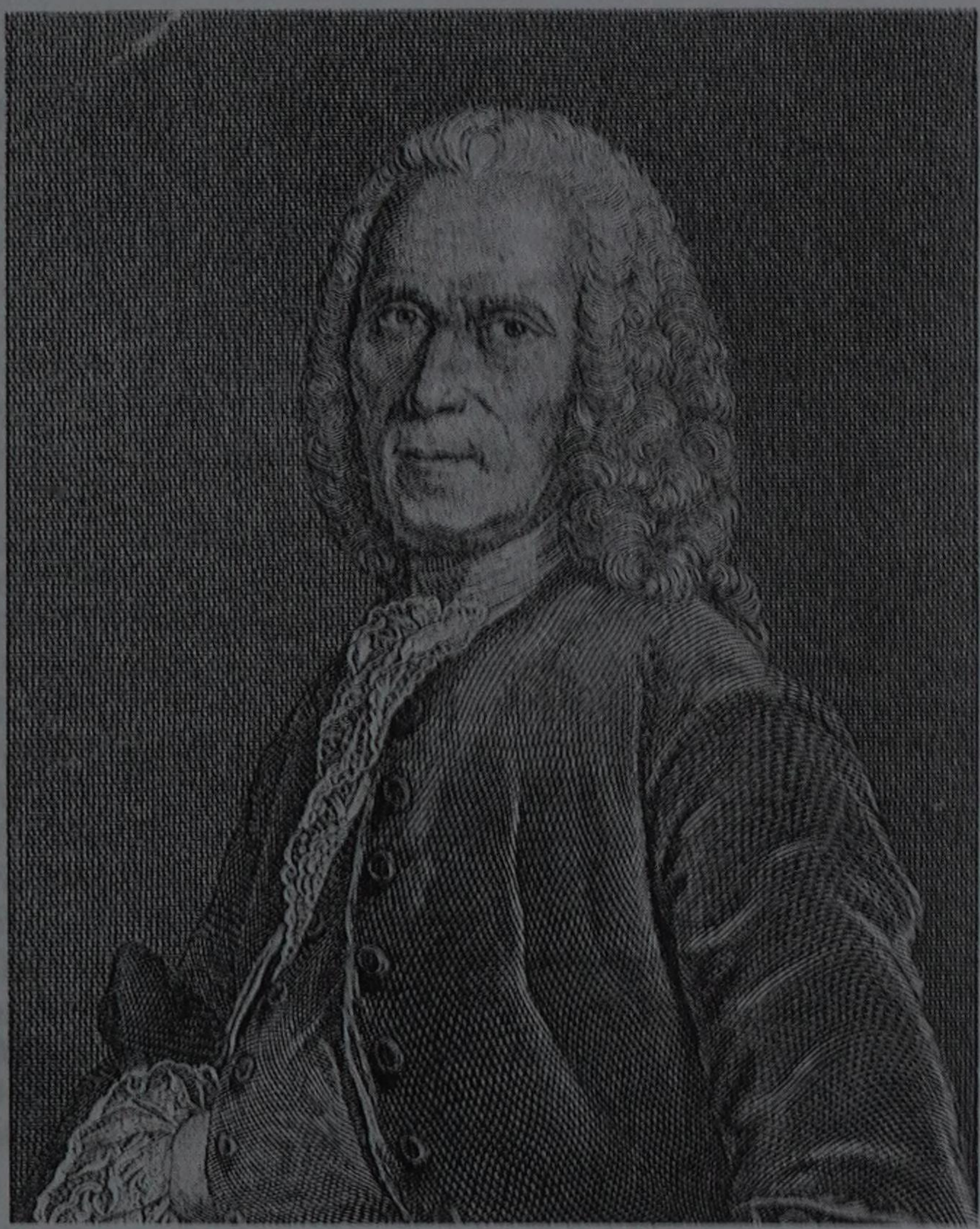


ILLUSTRATION 15. Jean Astruc, Frontispiece to his *Mémoires pour servir à l'histoire de la faculté de médecine de Montpellier* (Paris, 1767). Astruc (1684–1766) taught medicine at Toulouse and Montpellier before moving to Paris to a chair at the Collège Royal in 1731. He eventually became a member of the Paris Faculty in 1743. As a professor at the Collège Royal he promoted a new idea of the physician as a general practitioner, interested in the specific diseases of women and children, while his classic study of venereal disease, published in 1736, encouraged physicians to intrude on territory formerly reserved to surgeons.

anticipated by that of the Montpellier professor Gérard FitzGerald, *Traité des maladies des femmes, traduit du latin* (Paris, 1758). The Engl. version of Astruc's course appeared in London in 1743: see *A Treatise on all Diseases Incident to Women*.

medicalization of child diseases in particular, for children could and should be subjected to the same heroic remedies as their parents. From 12 months old they could be bled, purged, and given emetics, just like adults. Most child diseases, he emphasized none too subtly, could be satisfactorily cured if they were not treated in ignorance and above all treated early. Even rickets, a disease which he claimed had not appeared in Europe until the previous century, could be controlled by the learned physician: 'The disorder is moderate, and easily removed in the beginning, if proper remedies are used; but a confirmed Rachitis is dangerous and incommodious; for it either diminishes or destroys all the functions of the human body, renders respiration difficult, and digestion languid'.[128] Parents had been warned; the health of their children was not in the lap of the gods, but their own hands.

Astruc was particularly interested in encouraging his fellow physicians to see pregnancy, childbirth, and post-partum care as problems fit for their professional scrutiny in normal, not just extraordinary, circumstances. He did not, however, believe that the physician should take the place of the midwife and deliver babies himself. Although in the mid-1740s, under the Faculty's auspices, he gave lectures to midwives, which were later published, he openly admitted his knowledge was conned from books and that he had never practised the art.[129] The aim of his published lectures was to bring enlightenment to benighted midwives in the countryside. He had no intention of removing women from the delivery chamber but he wanted their activities to be ordered and regulated by the superior knowledge of the learned practitioner, who through the world of print had access to the best gynaecological practices. He saw himself as a conduit for disseminating state-of-the-art obstetrical knowledge, not a male-midwife.[130] Although much of this knowledge had been created by surgeons, it was Astruc the physician who authenticated its value and encouraged its use by the midwife.[131]

[128] *A General and Compleat Treatise on All the Diseases Incident to Children From Birth to the Age of Fifteen*, Eng. trans. (2 vols.; London, 1746), i. 218. Astruc believed that rickets appeared because of the cold weather. The fact that he thought it was a new disease emphasizes how little attention the Galenists of the 16th and 17th cents. had paid to the afflictions of childhood.

[129] *L'Art d'accoucher réduit à ses principes où l'on expose les pratiques les plus sûres & les plus usitées dans les différentes espèces d'accouchemens* (Paris, 1766); Engl. trans. as *Elements of Midwifery* (London, 1766).

[130] *L'Art d'accoucher*, pref., especially p. viii.

[131] Astruc was not revealing hidden knowledge, merely giving it his imprimatur. The knowledge was already in the public domain through the surgeons' own efforts. Thus, the world was well informed of the value of obstetrical forceps before Astruc pronounced on their use in 1766, if, admittedly, when he gave his lectures in 1745, the instrument had yet to be described in print in France. Astruc claimed to have examined all the various designs of this instrument and concluded in favour of Levret's: see *Art d'accoucher*, p. lvii. For Levret and the development of forceps, see below, Ch. 9, Sect. E.

Astruc, then, was not always seeking to increase the workload of his colleagues. He sometimes merely wished to bring within the boundaries of the physicians' expertise biological events in which they had usually shown little concern. Arguably, in pregnancy in particular, he intended the physician to become an authority, whose advice might be profitably sought, not a perpetual bedside attendant. A similar point of view was displayed by a second important contributor to the construction of an extended field of medical practice in the first decades of the eighteenth century, the Paris physician Nicolas Andry de Beauregard (1658–1742), who also held a chair at the Collège Royal. Andry's *L'Orthopédie*, published in 1738, not only discussed how to deal with children's diseases, such as smallpox, the king's evil, rickets, and ringworm, but also how to cure numerous bodily imperfections, like round-shoulders or pigeon-toes, which, he believed, were often caused by bad nursing.[132] Andry, in some respects, invented a completely new branch of medicine, cosmetic surgery, even if he usually advised against actual surgical intervention to effect aesthetic change.[133] Earlier surgeons, notably Ambroise Paré, may have provided amputees with false limbs and even promoted the use of false noses for those ravaged by the pox, but none before Andry in France had encouraged parents to remedy the simple defects of nature.[134]

Yet Andry, like Astruc, did not really expect his fellow physicians to waste their time helping to alleviate the errors of nature and turn ugly ducklings into swans. The book was addressed to parents with good sense, who realized that they had a moral duty to look after their children's appearance.

> We are born for one another, and ought to shun having anything about us that is shocking; and even though a Person should be left alone in the World, he ought not to neglect his Body so as to let it become ugly; for this would be contradicting the intention of the Creator.[135]

The book, therefore, was a self-help manual, an early example of an important eighteenth-century genre, as we shall see.[136] It deliberately eschewed problems such as cataract, which required 'the Light of Medicine, and all the Dexterity of

[132] *L'Orthopédie ou l'art de prévenir et de corriger dans les enfants les difformités du corps* (Paris, 1738). We cite the Eng. trans., *Orthopaedia, or the Art of Correcting and Preventing of Deformities in Children* (2 vols.; London, 1743). Andry became a Paris physician in 1697. He was a professor at the Collège Royal from 1701 to 1741; like Astruc he favoured chemical explanations of physiological functions.

[133] e.g. *Orthopaedia*, i. 183–4, where he explains how supernumerary fingers and toes can be removed with a silk ligature if they are simple flesh, but advises against amputating them if there is a bone: 'because this operation may kill the child'.

[134] See above, n. 110.

[135] *Orthopaedia*, i. 37. Andry mocked mothers who tried to disfigure beautiful daughters lest they became vain.

[136] Below, pp. 451–3.

Chirurgy to manage them'.[137] Its unavowed aim was to give the physician a new role as beautician-counsellor, in a socially fluid age where, as down-at-heel aristocrats and aspiring bourgeois knew, a comely daughter was the passport to wealth and status. Not surprisingly, all the illustrations and most of the discussion pertained to girls. This was medicine at the service of the marriage market.[138]

In the second half of the eighteenth century this new emphasis on the physician as obstetrical and child-care consultant grew apace. Moreover, in contrast to Astruc, the next generation of physicians believed that the learned practitioner should be able to deliver babies himself, not just offer advice to ignorant midwives. In consequence, several physicians began to provide medical students with private tuition in gynaecology and paediatrics, notably the Paris physician Antoine Petit (1718–94), whose courses on a range of surgical and medical subjects in the third quarter of the eighteenth century were extremely popular.[139] Antoine Petit could not wait for the day when women would be forbidden to deal with confinements altogether. Admittedly, he did not believe that physicians should turn midwife—that task should usually be left to surgeons—but he definitely wanted medical students to be capable of delivering babies if the need arose.[140]

At the same time, an ever-growing number of vernacular works on female and child diseases poured from the press to educate the élite in their medical duty. In 1784–5 the Paris physician Nicolas Chambon de Montaux, for instance, published three such lengthy tracts in the space of two years.[141] In the final decades of the Ancien Régime, moreover, physicians were placing such an emphasis on the importance of their role in child care that the Lyons practitioner Gilibert, for one, was calling for the establishment of specialist paediatric doctors who would devote their practice to nothing else. Such a physician would look after the mother from the moment she was pregnant, visit her once a week, choose the

[137] Andry, *Orthopaedia*, i. 37. Andry's remedies are, to say the least, homespun. Cf. his account of how to cure the king's evil by frequent purges with Epsom salts: see ibid. i. 111–13.

[138] Andry is remembered for inventing the word 'orthopaedics' although he contributed nothing positive to the study of deformities.

[139] Among students who followed his obstetrics course was the uncle of Laënnec in 1770: see A. Rouxeau, *Un étudiant en médecine quimpérois (Guillaume-François Laënnec) aux derniers jours de l'ancien régime* (Nantes, 1926), 40–2, 50–2. G. F. Laënnec also received instruction from a surgeon midwife. For exx. of Petit's course on delivering babies and female diseases, see Wellcome Institute for the History of Medicine Library, London, MS 3847, 3849, 3850–1.

[140] Antoine Petit, 'Accouchemens', Wellcome Institute for the History of Medicine, MS 3847, (n.d.), 'Discours préliminaire'. Petit's views on the role of surgeons in midwifery is cited in Jean Verdier, *La Jurisprudence de la médecine en France* (2 vols.; Alençon, 1762–3), i. 287. For male midwifery and the development of private medical courses, see below, Ch. 8, Sect. C, and Ch. 9, Sect. E.

[141] *Des Maladies des femmes* (2 vols.; Paris, 1784); id., *Des Maladies des filles* (2 vols.; Paris, 1785); id., *Des Maladies de la grossesse* (2 vols.; Paris, 1785). The Paris physician also published a study of *Des Maladies des enfants*, but only in Paris in 1799.

midwife, select a wet-nurse if the mother could not feed the infant herself, visit the wet-nurse in the countryside at regular intervals, then watch over the child's development to puberty.[142] Above all, these paediatric doctors were to keep careful records of their charges' progress and diseases, as he had done for ten years of his working life. If this were done, then '[T]he medical upbringing of children and the art of healing them, will rapidly proceed towards perfection.'[143]

It was in the second half of the eighteenth century, too, that physician-authors began to encourage their colleagues to expand the scope of their medical practice beyond its traditional social and urban parameters to embrace the rural and urban poor. In the first half of the century, as in earlier centuries, there were always individual physicians with a commitment to treat the indigent sick, such as the prominent Paris triturationist Philippe Hecquet. 'Whatever the hour that they came,' wrote his admiring contemporary biographer, 'however occupied he might be, they were sure to be well received.'[144] But Hecquet, like many of the seventeenth-century physicians who took a peculiar interest in the welfare of the poor, was a Jansenist, an austere Augustinian Christian who believed it was his duty to look after the most vulnerable in society.[145] There is no evidence that his concern was shared by his more worldly contemporaries. Hecquet, too, never seems to have advocated administering to the poor as a specific professional duty. The promotion of a new professional ethic really only dates from the 1760s and 1770s, as Enlightenment humanitarianism and contemporary populationist concerns encouraged physicians to broaden their medical horizons to embrace the nation at large.[146]

There were two distinctive strategies as to how learned medicine could be brought to the people in the final decades of the Ancien Régime. The first was to proffer medical advice at a distance in the form of easy-to-use self-help medical manuals. The popular printing-press thus became an ally of medical science and

[142] *Anarchie médicinale*, iii, 'Plan de recherches sur l'art de conserver la santé des enfans, de préservir & guérir leurs maladies'. Extracts of this work have been translated in S. Kottek, ' "Citizens! Do you want children's doctors?" An Early Vindication of "Paediatric Specialists" ', *Medical History*, 35 (1991), 103–16. Gilibert believed ten paediatric doctors could effectively serve the whole of Lyons.

[143] *Anarchie médicinale*, iii. 268. Kottek's trans. Unlike Astruc, Gilibert, who, as we saw, favoured expectant medicine, believed that children should not be treated in the same way as adults, and in fact seldom needed medicines.

[144] See [Lacherie], 'La Vie de M. Hecquet', a postscript to vol. iii of Philippe Hecquet, *La Médecine, la chirurgie et la pharmacie des pauvres*, ed. Lefèvre de Saint-Marc (3 vols.; Paris, 1740), esp. 66 [a posthumous work].

[145] See above, Ch. 5, Sect. A.

[146] Seemingly, the only physician to argue in print before 1750 that the rural poor should be brought under the umbrella of learned medicine was Pierre Hunauld, *Projet d'un nouveau cours général de médecine* (Château-Gontier, 1718), 38–9; he was a member of the corporation of physicians of Angers.

progress, as it became the vehicle to disseminate a rudimentary knowledge of the diagnosis and cure of disease to the literate poor and their traditional medical counsellors: wise women, rural *curés*, surgeons, and so on. In the second half of the eighteenth century, there were numerous such manuals published by concerned physicians, but the most important, not just in France but throughout Europe, was the *Avis au peuple sur sa santé* by the Montpellier-trained and Lausanne-based French Swiss Samuel-Auguste-David Tissot (1728–93).[147]

Tissot's *Avis au peuple* was initially published in 1761 and was eventually to be reprinted forty-two times in French and seventeen times in translation.[148] The book was specifically intended to improve the health of the rural population and dealt exclusively with acute diseases, where peasants would not be able to summon or visit an urban physician in time.[149] The work was particularly targeted at the village Lady Bountiful: Tissot flattered his female readership by claiming that women were more involved than men in active charity, had a sedentary life and were thus more likely to be on the spot, could pick out the hidden causes of a sick person's symptoms with 'a facility which would do honour to the best practitioner', and had a gift for gaining the confidence of patients.[150] The work began by exposing the common causes of disease among the peasantry, next explained why untutored care made the situation worse,[151] then outlined the symptoms and cure of a wide variety of acute ailments such as smallpox and dysentery. Every disease, he claimed, could be countered with one or more of the seventy-one simple remedies whose preparation he listed at the end of the book.[152] Most of their ingredients could be gathered locally, while those that had to be sought from the apothecary were inexpensive; indeed, for the benefit of his readers, Tissot even suggested how much the peasant-purchaser could expect to be charged.[153]

The recourse to the self-help manual was hardly a novel strategy, for in the seventeenth and early eighteenth centuries several similar works had been published by those who placed their Christian principles before professional custom. The Jansenist Hecquet, for instance, had left one in manuscript on his

[147] For an account of this literature, see R. Rey, 'La Vulgarisation médicale au XVIIIe siècle: Le Cas des dictionnaires portatifs de santé', *Revue d'histoire des sciences*, 44 (1991), 413–33.

[148] *Avis au peuple sur sa santé* (2nd rev. edn., 2 vols. in 1; Lyons, 1763). On this and other works of Tissot, see A. Emch-Dériaz, *Tissot: Physician of the Enlightenment* (New York, 1992), ch. 5. The first self-help manual to appear in the second half of the century was [Vandermonde], *Dictionnaire portatif de santé* (2 vols.; Paris, 1759).

[149] Tissot, *Avis*, author's pref., pp. xxii–xxvi. Tissot did not believe that chronic diseases were as frequent in the countryside as in the town: see below, pp. 454–5.

[150] Ibid., introd., p. 24.

[151] ch. 33 was specifically devoted to attacking charlatans and blaming them for depopulation.

[152] Ibid., pp. 701–10.

[153] On the assumption the peasant would be asked only to pay the cost price: see ibid., introd., p. 28.

death-bed, which was posthumously published in 1740.[154] What was new was the number of such publications and the size of the market they successfully created. However, the very popularity of the genre meant that in the long term the strategy had serious drawbacks, for it could easily encourage the indigent sick and their medical advisers to believe that the learned physician was still an irrelevance: the manual might replace the man.[155] For this reason, by the 1780s a more hands-on approach was being advocated. The peasants could only be successfully released from the mortal grip of the untrained practitioner by the physical presence of learned medicine in the countryside.

One way that this might be done, it was thought, was if the untrained practitioner remained *in situ* but was forced to take a crash course in faculty medicine, after which he or she would be subject to frequent visitations by local physicians.[156] A much bolder idea, however, that had captured the minds of most physician-reformers on the eve of the Revolution, was that the empirics should be chased from the medical field altogether and rural medicine entrusted to properly educated general practitioners. These new rural doctors would not be graduate physicians, but a lesser breed of certificated practitioner who would have been trained by their physician superiors simply in the identification and treatment of disease, rather than in theoretical medicine. In 1776 Tissot, the first to promote the innovation, described the new doctors as rural surgeons and private practitioners;[157] in 1790, in contrast, when Vicq d'Azyr presented his plan for general medical reform to the Health Committee of the National Assembly, they had been given the higher status of cantonal *médecins* and become state stipendiaries.[158] It was not enough, declared Vicq d'Azyr, that the rural poor were offered free consultations in the town (another option), for the

[154] See above, n. 144. Hecquet's *La Médecine, la chirurgie et la pharmacie des pauvres* went through several edns. An early ex. of the genre, the recipe book of Mme Fouquet, is referred to above, Ch. 4, Sect. E. For a general account, see A. Wear, 'Popularized Ideas of Health and Illness in Seventeenth-Century France', *Seventeenth-Century French Studies*, 8 (1986), 229–42.

[155] Rey, 'Vulgarisation', 420.

[156] This idea had been originally mooted by Hunauld; see n. 146, above. Some reformers believed that the rural clergy should be trained in a paramedical role. This idea was discussed in Vicq d'Azyr, 'Plan', 161–4: see below, n. 158. It was also current in other countries. It was championed e.g. by the Wolfenbüttel *philosophe* Campe in 1786: see A. J. La Vopa, *Grace, Talent and Merit: Poor Students, Clerical Careers, and Professional Ideology in Eighteenth-Century Germany* (Cambridge, 1988), 342.

[157] 'De l'instruction des chirurgiens pour la campagne' (1776), in *Essai sur les moyens de perfectionner les études de médecine* (Lausanne, 1785), 145–65.

[158] See Félix Vicq d'Azyr, 'Nouveau Plan de constitution pour la médecine en France', *Histoire et Mémoires de la Société Royale de Médecine: Années, 1787–1788*, 9 (1790), 59–73. Vicq seems to have thought that in normal circumstances cantonal doctors would only have three to four indigent patients per day (p. 68), so could still have a private practice. There would also be stipended doctors to treat the sick poor in towns. Vicq's plan was built on numerous contemporary memoranda drafted before and in the first year of the Revolution. For the wider reform debate, see esp.

poor would never seek expert medical help on their own volition: '[To] properly distribute [health care] to the countryside, it must be taken there.'[159]

Reformers, then, never envisioned an end to the traditional division in medical care between countryside and town. The poor were to become properly subject for the first time to the attentions of the corporate physicians in such a way as to cause minimum disruption to the traditional contours of the physicians' private practice. The justification for the continued medical divide between town and countryside, rich and poor, lay in the optimistic assumptions that were commonly made about the general state of the nation's health. Although it was recognized that peasants often inhabited highly insalubrious environments, it was believed that their personal lifestyles were fundamentally sound. As a result peasants might suffer from acute epidemic diseases but not the debilitating chronic maladies which were the scourge of the well-to-do town-dweller and the daily fare of the physician's practice.[160]

This assumption, it must be stressed, was neither the construction nor the property of the physicians alone, for it was firmly embedded in the contemporary enlightened ambience. Of particular importance here was the work of Rousseau whose entire published *œuvre*, starting with the *Discours sur les sciences et les arts* in 1750, was dedicated to displaying eighteenth-century urban civilization as amoral, unhappy, decadent, and debilitating. His ideal society, expressed most fully in the constitution he prepared for Corsica in the mid-1760s was one of straight-talking, self-sufficient, and self-governing peasants who had not been corrupted and weakened by the material gangrene of commercial society.[161] Rousseau's ideas were widely disseminated within the bourgeois public sphere thanks to the popularity of his moralizing novel *La Nouvelle Héloïse* (1761) and his educational treatise *Émile* (1762), which explained how an individual could be raised to be good and contented in the contemporary world.[162] His ideas, moreover, were taken up by a younger generation of writers, often part of the literary underground, who similarly praised the benefits of agricultural life.[163] Admittedly, the leading *philosophes* did not share Rousseau's

D. B. Weiner, 'Le Droit de l'homme à la santé: Une belle idée devant l'Assemblée constituante 1790–1791', *Clio Medica*, 5 (1970), 209–23.

[159] 'Plan', 71. The 'Plan' is more fully discussed below, Conclusion, Sect. C.

[160] Samuel-Auguste-David Tissot, *Essai sur les maladies des gens du monde* (augmented 3rd edn., Amsterdam, 1771), esp. 6–66 (1st pub. Lausanne, 1770), a comparison of the rich and poor's use and abuse of the non-naturals.

[161] The Corsican constitution was composed as a result of a request from Paoli, the rebel leader who had emancipated the island from Genoese control. For Rousseau's critique of contemporary society, see J. Shklar, *Man and Citizens: A Study of Rousseau's Social Thought* (Cambridge, 1969); R. D. Masters, *The Political Philosophy of Rousseau* (Princeton, 1976).

[162] There were at least seventy printings of *La Nouvelle Héloïse* by 1789. We have used *Julie, ou La Nouvelle Héloïse*, ed. R. Pomeau (Paris, 1988).

[163] e.g. Nicolas-Edmé Restif de la Bretonne, *La Vie de mon père* (Paris, 1929 edn.) (1st pub.

pastoral fantasies, but in an age that pursued and worshipped the natural, they too accepted that peasants, like primitives, were free from the ills to which civilization was heir. Diderot's views were no different from Tissot's: 'The maladies of people who live in the country are less numerous and more simple than ours; the further we depart from the bucolic life of the first ages of the world, the more the average life has been shortened.'[164]

The idea of the sturdy peasant, however, was not just an Enlightenment trope, for it went back at least to the turn of the eighteenth century when Fénelon in the *Aventures de Télémaque* (1699) vaunted the healthiness of the pastoral people of Bétique: 'The sobriety, moderation, and pure morals of this people gives them a long life free of disease. Old men can be seen there aged 120 and they are still gay and vigorous.'[165] The myth then was clearly deeply entrenched in French eighteenth-century culture. It was a myth, too, definitely of the countryside, not of the poor, for artisans, it was accepted, were often far from healthy. In consequence, several physicians at the end of the Ancien Régime, in imitation of the work of their Italian late seventeenth-century predecessor Bartolomeo Ramazzini, turned their attention to the occupational diseases of the urban poor. In the 1780s several memoranda were presented to the Royal Society of Medicine on the subject, such as the paper on the diseases of the hatters of Marseilles prepared by the local physician Claude-François Achard (1751–1809).[166] Again, though, it was not suggested that learned physicians should be directly involved professionally with the urban poor. Rather, they were to be detached observers, noting the environmental problems, and suggesting to employers and the authorities how conditions could be improved.[167]

This belief that the physician should supervise rather than permanently intrude in the extended field of medical practice also informed the efforts to bring animal diseases within the purlieu of the orthodox medical community in the final years of the Ancien Régime. In the sixteenth and seventeenth centuries institutionalized veterinary medicine did not exist: it was completely the

Paris, 1779), a hymn to patriarchal village society. For the literary underground, see R. Darnton, 'The High Enlightenment and the Low Life of Literature in Pre-Revolutionary France', *Past and Present*, 51 (1971), 81–105.

[164] See Diderot, 'Plan d'une université pour le gouvernement de Russie' [1770s], in id., *Œuvres complètes*, ed. J. Assézat (20 vols.; Paris, 1875–7), iii. 497.

[165] (Paris, 1866 edn.), bk. vii, esp. p. 148. On the importance of sober living for health, see below, Sect. E, *passim*.

[166] See Wilson, *Women and Medicine in the French Enlightenment*, 143. Interest in this field was admittedly slight before the Revolution: see A. Farge, 'Les Artisans malades de leur travail', *Annales ESC*, 32 (1977), 993–1006. Ramazzini was the author of a 1700 work on artisans' diseases, Fr. trans. by the chemist and Paris physician Antoine Fourcroy, *Essai sur les maladies des artisans* (Paris, 1777).

[167] For the new interest in public hygiene, see below, Sect. E, and Ch. 12, Sect. C, *passim*.

province of the itinerant quack and local uncertificated healers, especially the village blacksmith. By the mid-eighteenth century some French *philosophes* found the absence of locally organized animal care disquieting. Animals might not have rights (the French remained committed Cartesians in this regard), but both the good of the peasant and the good of the state demanded that animals as well as humankind should be better looked after. There was a need for a trained veterinary service. In this case, the initial impetus for expanding the terrain of medical practice came from outside the medical community. In 1750 one Claude Bourgelot, a royal equerry, published an *Élémens de Hippiatrique*, calling for the establishment of schools for teaching horse husbandry. His ideas were immediately taken up and extended to include all farm animals by a clutch of royal bureaucrats with physiocratic leanings, alarmed by the epizootics that had affected France in previous decades, and in 1762 and 1766 under the patronage of controller-general Bertin veterinary schools were established at Lyons and Alfort (outside Paris). The government's intention was that the pupils would be mainly the sons of farriers who would return to their homes as agents of enlightened animal medicine. No role for the medical community was initially envisaged at all.[168]

The situation, however, changed considerably in the reign of Louis XVI as Vicq d'Azyr and other medical reformers in the orbit of the Royal Society of Medicine began to claim that the physician had an interest in veterinary medicine in that human and animal diseases were related.[169] Moreover, it was alleged, a study of animal maladies could be of immense benefit to physicians, for animals could be the subject of therapeutic experiments forbidden on man.[170] Not surprisingly, then, when Vicq and his friends persuaded the government to give them chairs at Alfort in 1783, the school was turned for the next five years into a

[168] For an introd. to these developments, see C. Hannaway, 'Veterinary Medicine and Rural Health Care in Pre-Revolutionary France', *Bulletin of the History of Medicine*, 51 (1977), 431–47.

[169] This interest predated and encouraged the foundation of the Royal Society of Medicine in 1778. In 1774 Vicq had been asked by the government to report on a virulent rinderpest epidemic, and the following year his Parisian colleague Jean-Jacques Paulet produced a history of epizootics in 18th-cent. France which stressed the new role of the physicians in countering animal plagues. See Paulet, *Recherches historiques et physiques sur les maladies épizootiques avec les moyens d'y remédier dans tous les cas* (2 vols.; Paris, 1775), esp. ii. 118–38. For the rinderpest epidemic and the establishment of the Royal Society of Medicine, see C. Hannaway, 'Medicine, Public Welfare and the State in Eighteenth-Century France: The Société Royale de Médecine de Paris (1776–1793)', Ph.D. diss., Johns Hopkins univ., 1974, 81–101; and below, Ch. 12, Sect. D.

[170] Félix Vicq d'Azyr, *Exposé des moyens curatifs et préservatifs qui peuvent être employés contre les maladies pestilentielles* (Paris, 1776), 1–3. One idea actually tried was to use animals to see if pestilential viruses (Vicq's word) could be absorbed by liquids. A virus was 'collected' on an absorbent cloth (presumably by bringing the cloth into contact with a diseased animal), the cloth was then soaked in a liquid, and the virus transmitted to a healthy animal by inoculation (i.e. by slitting the skin and applying the cloth to the wound): see id., 'Considérations relatives à un parallèle entre les symptômes des épizooties et ceux de la peste humaine', in *Œuvres*, v. 156–7.

research institute, to the neglect of its primary task. Vicq, though, wanted to integrate the growing corps of veterinary surgeons into the wider medical community, not just purloin the resources of the state's schools for his own use. In his 1790 'Plan' he demanded that the Alfort school be relocated in the revamped Paris Medical Faculty, where a four-year course would be established to train an élite of veterinary surgeons. At the same time, he advocated the foundation of a series of provincial schools, creating a corps of veterinary 'outworkers', akin to the cantonal doctors.[171]

By the outbreak of the Revolution, therefore, a select group of medical theorists and reformers were claiming as the domain of the learned physician the diseases and problems of the entire human and animal population in France. But they had done this without calling for a radical restructuring of the existing hierarchical organization of medical practice. In an ideal world, the urban-based physicians would remain at the apex of the medical community, directing the informed ministrations of an ever-growing band of subalterns: apothecaries, surgeons/cantonal doctors, midwives, wet-nurses, and veterinary surgeons.[172] The reformers did envisage occasions, none the less, when the faculty physicians were to rush out into the field to supervise the activities of the band of outworkers more closely: in time of epidemics and epizootics. Nothing better illustrates the eighteenth-century revolution in the conception of the physician's role than the great emphasis that had come to be placed by 1789 in reformist circles on his active participation in epidemics.

Even in the early decades of the century, attitudes were clearly changing. As we have seen, when the plague broke out in Marseilles and Provence in 1720, some sections of the local corporative medical community behaved heroically, while a large number of physicians from outside the province responded to the government's call for volunteers to assist and organize the depleted medical forces.[173] The idea that physicians had a duty to rush into the fray whenever an epidemic was reported was slower to develop. An interventionist rhetoric was really only promoted in the 1770s and 1780s, when a number of the physician volunteers who had been employed by local intendants and provincial estates as temporary or permanent epidemic doctors, began to publish an account of their experiences in the field. In so doing, they wittingly set themselves up as role models for the wider community of corporate physicians and justified their

[171] 'Plan', 135–41.

[172] There was a radical structural edge to some of the reform proposals drawn up by physicians immediately before and during the Revolution, namely the union of physic and surgery and (during the Revolution) the establishment of a national rather than corporative system of organization: see below, Conclusion, Sect. C. But this does not gainsay the essential point that faculty graduates would police the new integrated field of medical practice at a distance.

[173] See above, Ch. 6, Sect. A.

temerity by explaining to their colleagues the necessity of imitating their heroism. Two professional, rather than simply humanitarian, reasons emerge from the literature for the physician's physical presence in the battle-zone.

In the first place, since so little was known about epidemics, it was essential that local physicians carefully observed every outbreak and recorded the symptoms and types of treatment advanced. These observations could be collated, published, and made available to medical outworkers faced with similar epidemics in the future. It was for this reason in particular that the Dijon physician Hugues Maret (1728–85), under government orders, published in 1775 an account of an epidemic he had witnessed in Burgundy fifteen years earlier: the province was being ravaged by an epidemic that controller-general Turgot believed was a similar affliction; the printed memorandum was the best way in the minister's view of bringing enlightenment to the ignorant carers on the ground.[174]

In the last decade of the Ancien Régime this work of record and collation was vigorously championed in the case of both epidemics and epizootics by the Royal Society of Medicine, as we will see in Chapter 12. But the physician's physical presence was not just required for reasons of science. If this had been so, then at some future date, when information about epidemics had been perfected, his presence would have become superfluous. This, though, was definitely never intended to happen, for the literature equally emphasized the physician's role as the learned practitioner. However well intentioned and well trained the medical outworker of the future might be, confronted by an epidemic he would always be out of his depth. As the Rouen physician Louis Lépecq de la Cloture (1736–1804) made clear in his 1776 account of the recent epidemic in the rural parish of Gros-Theil in Normandy, the local surgeon, one Provost, had given his all, but success depended on the arrival of the learned physician. Only once Lépecq had taught Provost the right curative method to follow in this particular instance—a dose of an emetic, plus a fruit and cider diet—could the surgeon put his talents to proper use.[175]

The physician's presence, then, in time of epidemic was essential. To be asked by the government's representative, the intendant, to go into the countryside on such occasions, was not a chore to be avoided but an opportunity to be seized and cherished. Thus, when Lépecq de la Cloture described his response to the request for help of the Rouen intendant Thiroux de Crosne, he presented himself to his readers, in a guise which recalls tales of Chicoyneau in Marseilles in 1720,[176] as an ardent medical missionary, an angel of mercy from the world of

[174] *Mémoire pour servir au traitement d'une fièvre épidémique* (Dijon, 1775), 3.
[175] *Observations sur les maladies épidémiques*, esp. 172–4.
[176] See above, Ch. 6, Sect. A.

learning who thought nothing of entering the stinking hovels of the indigent sick in order to restore their depleted spirits with his calming presence.

I had the honour to be chosen to second [the intendant's] charitable aims: I flew into the field of glory, to which I was summoned by the powerful call of duty, the taste of observation, and most of all, the innate love of my fellow creatures, delivered over to all the torments of a cruel malady. I travelled through all the hamlets [there were five], I observed the sick and dying: sixty inhabitants [of 1,100] had already succumbed under the murderous scythe whose dire blows I had to arrest.[177]

E. The Invention of Hygiene

The expansion of the constituency of medical practice to include the entire animal and human population was not the only change that occurred to the traditional conception of the physician's role in eighteenth-century France. In the course of the century a third role was invented for the physician. Besides being a physician-practitioner and a physician-supervisor in charge of an ever-increasing team of outworkers, he was also expected by the end of the Ancien Régime to be a physician-counsellor, whose efforts would be no longer directed wholly towards the cure of disease, but also in part towards the conservation of health. Like the developments explored in Section D, this further extension of the physician's role can be traced to the first decades of the eighteenth century. Again, in general it can be attributed to the spread of Enlightenment optimism and humanitarianism, as physicians came to believe that medical science could extend life and improve its quality, not just patch up the sick body.[178] But it was also encouraged from the mid-eighteenth century by the physicians' growing scepticism that it was possible to construct an evidentially sound mechanical account of the internal cause of disease. Just as this scepticism led some physicians to concentrate on studying semiotics, so it fostered an already-burgeoning interest in the non-naturals and the external causes of disease.[179] The average physician, it must be stressed, was not expected to spend a large amount of his life as a practitioner engaged in his new role as hygienist. Although trained to offer advice to his patients if called upon, this was not intended to be a particularly onerous part of his medical practice. Thanks to the eighteenth-century

[177] Lépecq de la Cloture, *Observations*, 95. For his affecting description of the cottages of the poor, see ibid. 96–7.

[178] In this respect the 18th-cent. physicians were once more the linear descendants of Paracelsus and his followers who had also claimed that improvements in medical knowledge could lead to longevity: see above, Ch. 2, Sect. D. Descartes, too, hoped that his new philosophy would prolong life: see M. D. Grmek, 'Les Idées de Descartes sur le prolongement de la vie et le mécanisme de la vieillissement', *Revue d'histoire des sciences*, 21 (1968), 285–302.

[179] Physicians in the second half of the century emphasized that hygiene was the most certain part of medicine. e.g. Gilibert, *Anarchie médicinale*, i. 171.

expansion of the vernacular printing-press, the more expert and committed of his colleagues were able to speak to and educate the public directly, as we will see. The community of corporate physicians was primarily interested in medicalizing, controlling, and disseminating hygienic information, not acting as hands-on hygienic private practitioners.

Admittedly, this new role for the graduate physician was not invented with the beginning of the iatromechanist era. Galenic physicians had always claimed to be interested in health-conservation as well as curing disease. Nevertheless, this concern was not greatly in evidence in sixteenth- and seventeenth-century France. Not only is there little sign that hygiene was taught as an important part of the medical curriculum, but physicians were largely unconcerned about using the printing-press to educate the literate public in the right use of the non-naturals. In the main, physicians restricted their published comments on health care to pedestrian accounts of how to avoid the plague, their most useful and heeded counsel being one of flight.[180] Occasional commentaries were published on the medieval hygiene poem associated with the tenth- and eleventh-century medical school of Salerno,[181] but only a few French physicians before 1700 published a detailed work on health care. The most sophisticated had been a work by the Reims professor La Framboisière that appeared at the turn of the seventeenth century in the aftermath of the Wars of Religion.[182] Moreover, the sixteenth- and seventeenth-century French physicians made little attempt to enter the realm of public health, beyond advocating and supervising routine plague measures. Although a number of French towns established health boards to deal with the plague, on which physicians served, these were usually impermanent and limited in their scope.[183] There was no French equivalents of the north Italian public-health boards which sent physicians out into the small towns and villages to report, not just on epidemics, but also local sanitary conditions.[184]

[180] For plague treatises, see above, Ch. 1, Sect. A, and Ch. 2, Sect. B.

[181] e.g. *Schola Saliterna, hoc est de valetudine tuenda, animadversiones novae et copiosae Renati Moreau* (Paris, 1625). Moreau dedicated the work to Richelieu whose perpetual ill health was legendary (see the comments in the dedication). Moreau (p. 13) claimed that the poem was written by John of Milan for Robert, duke of Normandy. Moreau in the *prolegomena* claimed to have recently taught hygiene at the Paris Faculty but had not been able to devote much time to it, having to cover the whole medical course in two years.

[182] Nicolas Abraham, sieur de La Framboisière, *Le Gouvernement nécessaire à chacun pour vivre longuement en santé* (2nd edn., Paris, 1601). La Framboisière claimed that now peace had returned everyone wanted to live a long time. Cf. this lengthy work with the trite comments of Jacques Fontaine of Aix, 'De santitate tuenda', in id., *Opera* (Cologne, 1612), 762–79, and Lazare Riverius, 'Hygenia', in his *Institutiones medicae in quinque libros distinctae* (The Hague, 1657), 328–421.

[183] See above, Ch. 6, Sect. A.

[184] See esp. C. M. Cipolla, *Miasmas and Disease: Public Health and the Environment in the Pre-Industrial Age* (London, 1992).

Such reticence to advise the literate public on how to stay healthy contrasted dramatically with the flood of hygiene literature which poured onto the market in the eighteenth century. In this period, too, lectures on hygiene became for the first time an important part of the faculty curriculum. An early example is the course of medicine delivered by François Marescot at Caen in 1719, where the art of conserving health was taught immediately after physiology.[185] At this date, Marescot could still bemoan hygiene's low esteem among the medical sciences,[186] but his own efforts must have gone far to raising its status in his own university. From the 1740s, if not before, students at Caen always discussed the subject as part of their statutory dissertation on general medical theory.[187]

The French physicians' interest in the conservation of the individual in the first half of the eighteenth century was relatively low-key and can be resolved primarily into a debate over the relative significance of diet and exercise in the maintenance of health. The predominant view, expressed by both chemists and triturationists, was that the key to health was diet. Extremists, like the ascetic Jansenist Hecquet, preached vegetarianism. The rich, he maintained, ate lots of meat laced with spicy sauces and washed down with strong wine. Nothing could have a more adverse effect on health, for such a diet was difficult to digest, caused an imperfect coction, and eventually impaired the elasticity of the organs. A vegetarian who lived on water, in contrast, would live to a ripe old age, as was proved by the longevity of nuns: 'Nothing has such a propensity to become melted in a milky juice than seeds and grain, which are also the best things in the world to be ground under a millstone.'[188] Hecquet's Parisian colleague Nicolas Andry, on the other hand, believed that the key to health was exercise. On several occasions he had students sustain the opinion as dissertations.[189] Without exercise the blood did not circulate and the lazy fell victim to rheumatism, apoplexy, palsy, the stone, gout, catarrhs of different kinds, and other unnamed diseases. The benefits of exercise were illustrated by the robust

[185] Bibliothèque de l'Arsenal, Paris, MS 969, pt. i, 'Universae medicinae lib. ii, Hygiene'; taken down by Jacques Artur. This MS also contains another undated hygiene course (*c.*1720) given at Paris.

[186] Ibid., p. 8.

[187] e.g. the diss. of Natalie-Godefroy Falaise of 1742, in Bibliothèque de l'Arsenal MS 824, fos. 249–56, *sub* 'hygiene'.

[188] *Traité des dispenses du Carême* (Paris, 1709), esp. 16. Hecquet here refers by analogy to the role of the gastric juices as well as the pummelling power of the stomach wall. The work pointed out the stupidity of those who attempted to get round the Church's rules on fasting. Hecquet's support of vegetarianism predates its promotion by the London doctor George Cheyne (1671–1743) in a work of 1724.

[189] e.g. 'Whether moderate exercise is not the best preserver of health': a diss. sustained under Andry's presidency in 1723 and 1747; pub. in Latin and English in Andry, *Orthopaedia*, ii. 212–40.

health enjoyed by peasants, sailors, and porters.[190] Exercise also explained why physicians were usually so healthy. Always on the move and eternally busy, they furthermore had no time to worry about catching diseases either; hence the survival of the courageous physicians who so recently had volunteered to fight the plague in Marseilles and elsewhere.[191] As for nuns and monks, they lived for so long because they tended their gardens and exercised their vocal chords. For the decidedly anti-Jansenist Andry, singing along with dancing (provided it was not lewd) was a sure way to keep healthy.[192]

After 1750 the physicians' interest in the conservation of the health of the individual, measured in terms of the number of self-help manuals published, quickened markedly, but the emphasis changed. Diet and exercise were replaced, if never entirely,[193] as centres of interest by an obsessive concern with air quality. The key to a healthy life was to live in an environment where air circulated freely. The countryside, therefore, was judged a more suitable place to inhabit than the town, and the public was encouraged to open windows, wrap up warmly and let in drafts, or use artificial ventilators (such as fans) if necessary.[194]

The change in emphasis reflected the French physicians' conversion to the belief that the air was the primary external cause of disease. Galenists had always recognized the important role of air in epidemics, if they were divided, as we saw, as to whether the air served as a vector for terrestrial exhalations or supernatural influences.[195] Their iatromechanist successors, too, followed the Galenic

[190] Andry, *Orthopaedia*, 216. This was an early and extended version of the commonplace 18th-cent. medical trope of the sturdy peasant: see above, Sect. D.

[191] Andry, *Orthopaedia*, ii. 217–18. By implication, those unable to take exercise as part of their job had to find ways of keeping the body in trim. Andry would have approved of the vibrating chair invented by the abbé de Saint-Pierre in the 1730s: see the entry in the *Dictionnaire de biographie française*, *sub* Jean Astruc.

[192] For the healthy effects of dancing, see Andry, *Orthopaedia*, i. 228–9. Not everyone took sides in the debate: the Parisian physician Étienne-François Geoffroy in a letter to the secretary of the Royal Society, Hans Sloane (1660–1753), in 1714 claimed that the surfeit of apoplexies in Paris was due both to little exercise and over-succulent foods; see BL Add. MSS 4043, fo. 271: letter 3 July 1714.

[193] It was only after 1750 that the debate began to have a real effect outside the community of corporate physicians. Exercise, if not diet, in the last decades of the Ancien Régime became an educational fetish. The concept of exercise, too, was now extended from walking, horse-riding, ball-games, and dancing to include swimming, if the French showed little interest in sea-bathing: see below, n. 204. Several go-ahead schools, notably those run by the Benedictines, introduced swimming into the curriculum: see Brockliss, *Higher Education*, 90–2. Educationalists during the Revolution stressed the importance of exercise for producing a sound patriot army: see H.-C. Haarten, *Elementarschule und Pädogogik in der Französischen Revolution* (Ancien Régime, Aufklärung und Revolution, 19; Munich, 1990), 299–306.

[194] Cf. the tone of the hygiene manual of the Paris physician Achille-Guillaume Le Bègue de Presle (*c.*1735–1806), *La Conservation de la santé, ou avis sur les dangers qu'il importe à chacun d'éviter pour se conserver en bonne santé et prolonger sa vie* (Paris, 1763).

[195] See above, Ch. 2, Sect. E, for the quarrel between Fernelians and their opponents. On the morbidity of the air, see La Framboisière, *Gouvernement*, bk. 1, ch. 2.

rationalists in insisting that contagious diseases were the result of airborne miasmas from marshes, open sewers, stagnant wells, graveyards, and so on. However, the idea that the air was the source of virtually all diseases was a novel conviction that only began to surface about 1750. Thereafter, an interest in air quality seems to have become a peculiarly French fad, one that was quickly taken up by the literati and promoted in the *Encyclopédie*.[196] The *philosophe* Marmontel, for instance, writing in 1773, was certain that the chance destruction of a number of buildings surrounding the Paris Hôtel-Dieu in 1718 had been a godsend. Although the number of sick in the hospital had not declined, the consequent improvement in air circulation had ensured that 'the death-rate was 400 less [per annum]. As a result in fifty-four years, this draft of air has saved the life of more than 20,000 citizens.'[197]

A particular aspect of this concern about the quality of the air was the conviction that disease could be caused by unseasonable weather or sudden climatic change. This idea seems to have surfaced for the first time in a book published in 1752 by the Nérac- (later Paris-)based physician Joseph Raulin (1708–84).[198] Twenty years later it was an obsession. Among the many tasks entrusted to Vicq d'Azyr's legion of corresponding members of the Royal Society of Medicine in the 1780s was not simply the location of particularly insanitary areas in their locality, but the secular study of barometric pressure and temperature. It was hoped that thereby the connection between climatic change and disease would be definitely proven as a result of careful measurement, and a hygienic map of France eventually produced delineating the healthy and unhealthy regions.[199] The first medical topography to be published was a study of Normandy by Louis Lépecq de la Cloture in 1778, which contained meteorological observations over fifteen years. As this appeared under the Society's patronage, it was clearly intended as a model for other medical topographers to follow.[200] On the

[196] Cf. esp. *Encyclopédie*, i. 233–4 (1751), art. 'air', and viii. 386 (1765), art. 'hygiène'. Admittedly, the *Encyclopédie* did not pay exclusive attention to air quality in discussing health care. The importance of air for health and disease is encountered continually in French medical works after 1750, often as casual asides.

[197] Jean-François Marmontel, *La Voix des pauvres: Epître au roi, sur l'incendie de l'Hôtel-Dieu* (Paris, 1773), 8.

[198] Joseph Raulin, *Des maladies occasionées par les promptes et fréquentes variations de l'air* (Paris, 1752). See also François Boissier de Sauvages, *Dissertation où l'on recherche comment l'air suivant ses différentes qualités agit sur le corps humain* (Bordeaux, 1754).

[199] Individual physicians had begun the task of charting the connection between climate and disease long before the foundation of the Royal Society of Medicine. See the MS notebooks of the Beaune physician Vivant-Augustin Ganiare, who noted the wind direction and [average?] temperature each day from 1736 to 1770, and compiled a monthly account relating the wind direction to the prevalent epidemics in the town: BM Dijon MS 425–33.

[200] *Collections d'observations sur les maladies et constitutions épidémiques* (Rouen, 1778), esp. pt. ii. The results of other topographical studies in the final decades of the Ancien Régime were published in the annual *Mémoires* of the Royal Society of Medicine but only began to be published

eve of the Revolution, however, it was not only physicians who were fascinated by meteorological statistics. The Parisian public was equally preoccupied by the weather. The front page of Paris's only daily newspaper consisted of a table of meteorological statistics from the previous day! When early in its history the newspaper was temporarily suppressed by the government, the editors still continued to print its weather reports.[201]

The French concern about air quality in the second half of the eighteenth century was part of a novel European-wide interest in the environment and its effect on health. This was inspired in particular by the popularization of the writings of a number of English physicians of the late seventeenth and early eighteenth centuries, notably Thomas Sydenham, famous for his study of the 'constitutions' of epidemic diseases such as smallpox. Taking their cue from Sydenham, physicians all over the Continent in the second half of the eighteenth century claimed that the link between the environment and disease had been recognized by Hippocrates, particularly in his treatises on *Epidemics* and *Airs, Waters, and Places*, but then forgotten by Galen and his followers. In emphasizing the importance of the quality of the air, they were thus rediscovering the 'true' Hippocrates.[202]

As the good or poor quality of the air was judged primarily by its smell, this novel interest must also have been connected with the eighteenth century's apparently greater sensitivity to unpleasant odours. According to A. Corbin there was a 'perceptual' revolution in the course of the century, which led to individuals, their habitation, and the wider environment being judged and labelled according to their smell.[203] This new sensitivity must in turn have encouraged another aspect of the hygienic movement, which the concern about the quality of the air helped to promote if it did not spawn: the new enthusiasm for bathing. Before 1700 frequent immersion in water was socially and medically frowned upon. Even aristocrats washed infrequently, for body odour was considered a protective cocoon and sexual stimulant. Eighteenth-century physicians, in contrast, declared bathing good for the health. Not only could cold or tepid baths be used to stimulate or relax the body's fibres, but they could

independently in book-form in the 1790s, and many remain in MS. For this aspect of the Society's activities, see below, Ch. 12, Sect. D.

[201] *Journal de Paris*, 23–8 (1777). The *Journal* gave details of temperature and barometric pressure (by the hour), the wind direction, and amount of cloud cover. This, it should be stressed, was not a weather forecast.

[202] For a useful account of the new Hippocratism, see J. C. Riley, *The Eighteenth-Century Campaign to Avoid Disease* (London, 1987), esp. chs. 1 and 4. A particularly important English work from the first part of the 18th cent. was John Arbuthnot (1667–1735), *Essay Concerning the Effects of Air on Human Beings* (London, 1733), Fr. trans. 1742.

[203] *The Foul and the Fragrant: Odor and the French Social Imagination*, Eng. trans. (New York, 1986), esp. chs. 1–6.

open up the pores and release unhealthy miasmas unwittingly absorbed in breathing or eating and drinking (for everything contained air).[204]

However, French neo-Hippocratism was also fed by special factors that doubtless accounts for the intensity of the air-quality fad in this part of Europe. In the first place, some weight must be accorded the contemporary influence of Montesquieu, whose assertion of a linkage between climate and political and social institutions in his *De l'esprit des lois* of 1748 must have played some role in the growth of medical topography.[205] Influential, too, must have been the peculiar form of vitalism developed by La Caze and his friends with its emphasis on the dangers of over- and under-stimulation of the body. Air was the one non-natural affecting our bodies every moment of our lives and from which there was no escape, for good or ill.

But probably of crucial importance for heightening the concern about the quality of the air were the contemporary developments in gas chemistry with which France was closely associated. The discovery that the air was not an element but a compound, and that one of its components (dephlogisticated air or oxygen) was essential to life seemed to suggest that the air we breathe could be subject to change, like any other mixed body. The sophisticated physician and scientist of the 1770s and 1780s did not just record the temperature and barometric pressure. Armed with a new instrument, called the eudiometer, he set out to test the oxygen levels in the most mephitic environments. Although it proved impossible to construct a meaningful stench–oxygen index, this did nothing to stem enthusiasm for the new gadget before the French Revolution. The Italian eudiometrist Felice Fontana (1730–1805), for instance, made his reputation in Paris carrying out trials in the notoriously malodorous cemetery of the Innocents in Paris.[206]

With one important exception, eighteenth-century francophone hygienist physicians limited their interest in adult health care to diet, exercise, and air. The exception was the Swiss Tissot, who was also concerned with the potential dangers to health from self-abuse. Immoderate sexual activity had always been

[204] G. Vigarello, *Concepts of Cleanliness: Changing Attitudes in France since the Middle Ages*, Eng. trans. (Cambridge, 1988). The French in the 18th cent. did not share the English enthusiasm for sea-bathing, which only began to become popular after 1815: see Charles-Louis Mourgué, *Journal des bains de mer de Dieppe, ou recherches et observations sur l'usage hygiénique et thérapeutique* (Paris, 1823).

[205] See *The Spirit of the Laws*, Eng. trans. (New York, 1949), vol. i, bks. xiv–xvi. Montesquieu was developing ideas first raised by Bodin in his *Six Livres de la république* (Paris, 1576). Significantly, Montesquieu was Raulin's patron and the dedicatee of the 1752 publication referred to above, n. 198.

[206] The most recent account of European eudiometry is S. Schaffer, 'Measuring Virtue: Eudiometry, Enlightenment and Pneumatic Medicine', in Cunningham and French (eds.), *Medical Enlightenment*.

frowned upon by French physicians; Galenists decried its debilitating physical consequences, even in the most cursory hygienic treatises.[207] Tissot, however, seems to have been the first to preach the dangers of excessive masturbation, at least to a francophone audience, with the publication of his *L'Onanisme* in 1760.[208] According to Tissot, masturbation was the scourge of the present age, perhaps responsible for more damage to the population than the ravages of smallpox.[209] Whereas the lassitude caused by normal coitus was soon repaired by the concomitant stimulus of a joyful soul in love, perpetual self-abuse led to permanent weakness and an early grave. Witness the rapid demise from consumption of Tissot's Genevan classmate, who habitually masturbated in philosophy lectures.[210] War, thus, had to be declared on this filthy practice, and if moral exhortation could not prevail, then the young, especially the female young, had to be frightened by a physical description of its effects into mending their ways. 'When one has a knowledge of men, one is quickly persuaded that it is easier to turn them from vice by fear of a present malady, than by reasoning founded on principles whose truth one has not taken sufficient care to inculcate.'[211]

Tissot's fixation with masturbation struck a chord with the French and wider European public, for his book was continually republished and translated over the next two decades.[212] Obviously, it fed into the contemporary Rousseauist debate about degeneracy.[213] Doubtless, too, its popularity reflected contemporary fears about depopulation, although Tissot himself made no specific mention of this concern.[214] However, other French physicians, while they read and applauded the work,[215] made no attempt to cash in on its popular appeal. French hygienist physicians did not see themselves as sex therapists *avant la lettre*. Indeed, while always emphasizing the importance of following professional hygienic advice in the three areas already discussed, they were also quick to make clear that healthy individuals should live their lives free from the learned

[207] e.g. Riverius, *Institutiones medicae*, 419. The Montpellier professor believed it was particularly dangerous for the old, weak, and dry-natured.

[208] *L'Onanisme: Dissertation sur les maladies produites par la masturbation* (Toulouse, 1775 edn.) (1st pub. 1760).

[209] Ibid., pref., pp. xii–xiii.

[210] Ibid. 86.

[211] Ibid., pref., p. vii. Tissot painted a frightening picture of the effects of female masturbation: see p. 47.

[212] The Toulouse edn. claims to be the 10th. An Engl. transl. appeared in 1769.

[213] Rousseau, who denounced masturbation in bk. IV of *Émile* gave the work his seal of approval in a letter of 1762: see P. Lejeune, 'Le Dangereux Supplément: Lecture d'un aveu de Rousseau', *Annales ESC*, 29 (1974), 1020.

[214] Tissot did discuss the problem in the introd. to his *Avis au peuple sur sa santé*, 1–15, where medical ignorance in the countryside was one of several reasons he cites for contemporary depopulation. For the debate, see below, Ch. 12, Sect. B.

[215] Gilibert, *Anarchie médicinale*, i. 103, claimed that the treatise had 'converted more libertines than all the sermons of preachers'.

physician's tutelary shadow as much as possible. '[W]hen one enjoys health,' wrote the Valence professor Arnulphe d'Aumont (1720–82 or –1800) in the *Encyclopédie*, 'and it is only a question of preserving it by temperance and moderation, one can avoid having a need of physicians.'[216] Above all, even more than their Galenic predecessors, they had no truck with the idea that the healthy body needed frequent purgings and bleedings to retain its equilibrium.[217] Although there is plenty of evidence in the eighteenth century of a growing anxiety about health among the population at large, it was not the physicians' intention to create a nation of *malades imaginaires*.[218]

On the other hand, if the physicians were anxious not to turn adult Frenchmen and women into valetudinarians, they were definitely concerned that the nation's parents should pay considerably more attention than had been traditionally the case to the health of their offspring. While they might believe that adults, with a little guidance, could be largely left to their own devices, this was definitely not the case with children. Child-rearing was a serious business that could no longer be left to parents, nurses, and tutors. Here was the real hygienic revolution of the eighteenth century, for an interest in child care *per se* had no classical antecedents. The concern was part and parcel not only of contemporary populationist fears—the high infant mortality rate was seen as a threat to the wealth and power of the state—but also of the development of the new concept of the bourgeois family, earlier referred to, which gave an equal emphasis to all its members. Within the bourgeois family, children were no longer seen as unformed adults but as objects of value in their own right, to be cherished and instructed in a manner befitting their emotional and intellectual capacity. The seminal influence on the development of this new respect for childhood was once again Rousseau, whose *Émile* specifically promoted for the first time a concept of child-centred learning.[219]

The physicians' interest in the health care of babies and infants closely mirrored the chronology of the wider sentimental revolution. In the first half of the eighteenth century only a few medical works were published on the subject. From the 1760s, in contrast, as the new attitude to children was disseminated

[216] viii. 385. For D'Aumont's views, see W. Coleman, 'Health and Hygiene in the *Encyclopédie*: A Medical Doctrine for the Bourgeoisie', *Journal of the History of Medicine*, 29 (1974), 399–421.

[217] This set the advice of physician-hygienists apart from popular hygienic wisdom peddled in the Bibliothèque bleue: see W. Coleman, 'The People's Health: Medical Themes in Eighteenth-Century Popular Medicine', *Bulletin for the History of Medicine*, 51 (1977), 55–74.

[218] For the new anxiety about health, see below, Ch. 10, *passim*.

[219] On the 'invention' of the child, see esp. P. Ariès, *Centuries of Childhood*, Eng. trans. (Harmondsworth, 1962), pt. iii, and G. Snyders, *La Pédagogie en France aux XVIIe et XVIIIe siècles* (Paris, 1965), bk. ii, pt. i. For the influence of *Émile*, see J. Bloch, *Rousseauism and Education in Eighteenth-Century France* (*Studies on Voltaire and the Eighteenth Century*, 325; Oxford, 1995), esp. ch. 2. For the development of the 'bourgeois' family, see above, Sect. D.

within the élite, a steady stream of specialist paediatric pamphlets appeared from the press, quickly turning child care into an independent branch of hygiene. The aim of the manuals was to teach parents how complex a task child-rearing was and to offer professional advice on how to succeed.[220]

Throughout the century the physicians concentrated their advice to parents around three central questions: how the mother should conduct her life in pregnancy, how the baby should be nursed, and how the baby/child should be clothed. Their answers were also always the same. The physicians openly criticized contemporary mores. Pregnant women were advised to live soberly and quietly, mothers were told to suckle their own babies, and parents were warned not to swaddle their infants too tightly or constrict young bodies in over-tight stays. Before 1760 physicians adopted a conciliatory tone: they accepted the status quo and merely hoped that the worst effects of (in their eyes) poor child care could be mitigated. Thereafter, in contrast, their critique was more frequently articulated, strident, and uncompromising. The dynamics of the debate can be seen clearly in the case of the promotion of maternal breast-feeding.

The most important writer on child care in the first half of the century was Andry whose *Orthopaedia* discussed the art of preventing as well as correcting child deformities. Andry, however, had nothing to say about putting children out to nurse. He simply assumed that it was the custom among his traditional clients and targeted his critique at slovenly nurses who permanently damaged their charges by, *inter alia*, 'tying tender Infants hard and fast with swathing Bands, as if they were packing up Goods to send abroad'.[221] Astruc, writing at the same time, in contrast, was keen that mothers should feed their offspring but his argument was primarily moral. Babies sucked in the manners and disposition of the nurse. If only people of honour and probity would suckle their own young, 'there would not be so many graceless, disobedient and degenerate children of our age'.[222] The argument was only specifically hygienic to the extent that Astruc believed that mothers who failed to breast-feed might later contract cancer.[223] In other words, it was the physical health of the mother, not the child, which was deemed to be put at risk.[224]

[220] A number of the works also dealt with specific children's diseases but by and large the two genres were treated separately after 1760. In the mid-century Pierre Brouzet, physician ordinary to the king, made the important distinction between the 'medicinal education' of children and children's diseases, see his *Essai sur l'éducation médicinale des enfans, et sur leurs maladies* (Paris, 1754). In the first instance physicians were counsellors, peddling their advice primarily in print, rather than practitioners, although the distinction could be blurred: clearly Gilibert envisaged the creation of paediatric physicians who would directly counsel individual families on how to rear their children, as well as treating their children's diseases: see above, Sect. D.

[221] *Orthopaedia*, i. 216.

[222] *Treatise on All the Diseases Incident to Children*, 17–18. Astruc also suggested that there would be little natural harmony between siblings when they had fed from different nurses.

[223] Ibid. 20.

[224] Cf. also Philippe Hecquet, *De l'Obligation aux femmes de nourrir leurs enfans* (Trévoux,

From the 1760s the physicians' attitude to maternal breast-feeding hardened. The most important writer on child care in the second half of the eighteenth century was the Paris graduate Jean-Charles Desessartz (1729–1811), whose *Traité de l'éducation corporelle des enfans en bas âge* (1760) was pillaged by many subsequent authors. Desessartz's attention was completely focused on the physical welfare of the child and his tone was angry and forthright. In his opinion, putting a child out to nurse was a death-sentence; thanks to the carelessness of nurses only 5 per cent of the infants sent off to villages around Paris ever returned; and the same was true of London. The result was depopulation on a huge scale, evidenced by the fact that hardly anybody who lived in Paris had been born there. The child-rearing practices of the French were shameful. They paid more attention to rearing their dogs than raising their own offspring. The pernicious custom of putting infants out to nurse should be abandoned for the sake of the preservation of the family line, the good of society (which would only prosper materially when the stock was no longer degenerate), and the glory of the state (which sought capable citizens). In complete contrast to his predecessors earlier in the century, Desessartz declared war on the wet-nurse in the name of little children.[225]

The change in tone in the middle decades of the century was not fortuitous. It reflected not merely the physicians' growing confidence in their new role as physician-counsellor, but also salon society's contemporary mania for the natural in all its guises, a characteristic of the radical stage of the French Enlightenment that Rousseau articulated above all. Indeed, it was Rousseau, once more through his best-selling educational treatise *Émile*, who helped to cement the new ethic of maternal breast-feeding in the minds of the reading public.[226] The physicians after 1760 could afford to be strident and dogmatic because their

1708), esp. 103–45. Hecquet was equally chiefly concerned about the moral dangers of putting a child out to nurse (to both infant and mother: mothers became debauched). But he did appreciate that the habit carried physical dangers to the child, if he did not expand the statement beyond complaining that the milk of nurses was often too strong (because of their diet) and that they fed their charges bouillons too soon.

[225] *Traité de l'éducation corporelle des enfans en bas âge, ou réflexions pratiques sur les moyens de procurer une meilleure constitution aux citoyens* (Paris, 1760), esp. 'Discours préliminaire'. See also Joseph Raulin, *De la conservation des enfans* (3 vols. in 2; Yverdon, 1770), ii. 99–154; Jacques Ballexserd, *Dissertation sur l'éducation physique des enfants depuis leur naissance jusqu'à l'âge de puberté* (Paris, 1762), 29–62; there were several edns. of this second work by a Genevan physician. All stress the populationist aspect, if Raulin is less apoplectic than his two colleagues.

[226] See *Émile*, Eng. trans. (London, 1969), 10–12. Rousseau concentrated on the moral arguments and used Desessartz in preparing his work. Voltaire, too, supported maternal breast-feeding as is clear from his comments in *L'Homme aux quarante écus* (1st pub. 1768) in id., *Candide, L'Ingénu, L'Homme aux quarante écus*, ed. P. Grimal (Paris, 1957), 211, 250. For the debate in general, see M. Jacobus, 'Incorruptible Milk: Breast-Feeding and the French Revolution', in S. E. Melzer and L. W. Rabine (eds.), *Rebel Daughters: Women and the French Revolution* (Oxford, 1992).

views on maternal breast-feeding gelled with the vision of bourgeois domesticity being presented on the stage and in the novel, and their populationist rhetoric rang true among a literate public disturbed for the first time by the horrendous death rate among the young. According to the physicians, maternal breast-feeding was a humanitarian and socio-political duty. By 1789 French novelists, including female writers, were stressing the delights, not the duty, of breast-feeding, and emphasizing that the practice was the key to successful relations between mother and (especially female) child.[227]

There was one area of child care, however, where the physicians (or some of them) were definitely in the van of public opinion: the promotion of smallpox inoculation. Smallpox was not a disease peculiar to children, but it was definitely one of the chief causes of eighteenth-century child mortality and the most formidable epidemic disease in the Ancien Régime's pathosystem following the demise of the plague. Not surprisingly, given the awakening interest in child diseases from the turn of the century, smallpox (like rickets) became a major subject of attention within the élite of the medical community. Much ink was spilt over the century debating how victims of the disease might best be treated, especially without permanent disfigurement, but in particular interest centred around the possibility of prophylaxis.[228] When inoculation (a practice long common in the Near East and introduced to England in 1718 by Lady Mary Wortley Montagu) was first discussed in French medical circles in the 1720s, it was dismissed out of hand. To dogmatic iatromechanists, like Hecquet and Astruc, even to the first vitalists of a later generation, such as La Mettrie, the idea of deliberately giving a healthy person a dose of smallpox in order to build up an immunity seemed absurd and dangerous.[229] By the 1750s, however, opinion within the medical community was changing rapidly. In 1752 the scientist and explorer Charles-Marie de La Condamine (not a physician) supported the practice in a paper to the Academy of Sciences, while a few years later a leading practitioner of smallpox inoculation, the Swiss physician Théodore Tronchin (1709–81), arrived in the capital.[230] At the same time, the new technique was

[227] See esp. I. Brouard-Arends, *Vie et images maternelles au XVIIIe siècle* (*Studies on Voltaire and the Eighteenth Century*, 291; Oxford, 1991), pp. 41–3, and chs. 13 and 15–20. The view of the breast-feeding role of the mother in the final decades of the century depicted in literature is clear-cut.

[228] For a general account, see G. Miller, *The Adoption of Inoculation for Smallpox in England and France* (Philadelphia, 1957); and P. Darmon, *La Longue Traque de la vérole: Les Pionniers de la médecine préventative* (Paris, 1986). And cf. below, Ch. 12, Sect. B.

[229] For an account of the debate in the Paris Faculty, see P. Delaunay, *Le Monde médical parisien au XVIIIe siècle* (Paris, 1906), 280–97. Also, Wellman, *La Mettrie*, 95–9; and 'éloge historique' of Astruc, in the posthumously published Jean Astruc, *Mémoires pour servir à l'histoire de la faculté de médecine de Montpellier*, pp. 1–li (Astruc published his doubts on inoculation in 1756).

[230] He had originally practised in Amsterdam and in 1748 had inoculated his own son. For Tronchin's life, see H. Tronchin, *Un médecin du XVIIIe siècle: Théodore Tronchin, 1709–1781* (Paris, 1906).

popularized through the literary efforts of another Swiss, Tissot, who published an important defence of inoculation in 1754.[231] The following year a student in the Paris Faculty, one P. J. Morisot des Landes, defended the practice in a dissertation,[232] and by 1760 (and perhaps before) inoculation was being championed at Montpellier.[233] The 1750s was thus the vital decade, but the practice was still not warmly embraced outside the medical community. Although the technique became socially respectable in 1756 when Tronchin inoculated the children of the duc d'Orléans, most people in polite society remained suspicious for at least the next decade. An important role in the popularization of the practice was played by the *Encyclopédie*, whose lengthy, positive article on inoculation appeared in 1765, written by Tronchin.[234] But as late as 1769 a Montpellier graduate bemoaned the reluctance of French parents to inoculate their children in comparison with parents in other countries.[235]

The initial prejudice within the medical community to inoculation was perfectly reasonable. In a rationalist age, critics were understandably suspicious of a prophylactic that defended the patient by giving him a dose (albeit mild) of the disease, when there was no rationale underpinning the practice (which, to boot, was of Turkish origin). Moreover, little was really known in the second quarter of the eighteenth century about the frequency of smallpox. In the critics' opinion, it was thus incumbent upon the promoters of inoculation to demonstrate both its need and efficacy. Until more information was provided, it was a doctor's duty to cure disease not foster it, especially when inoculation was sometimes mortal. As many people (perhaps half the population) never caught smallpox anyway, it seemed pointless to risk someone's life unnecessarily. By the 1750s, in contrast, supporters of inoculation operated in a very different environment. Not only was medicine much less of a causal science, so that there was no longer any need to offer a rationale of inoculation, but much more was known about the incidence of smallpox and the positive advantages that accrued from prophylactic action, thanks to the statistical studies undertaken by British inoculators.[236] Indeed, it could be argued that the science of medical statistics

[231] *L'Inoculation justifiée* (Lausanne, 1754). A Paris edn. appeared in 1773.

[232] 'An Parisinis variolarum inoculatio?' (1755), BFMP TMP in-4°, xiii, no. 8.

[233] See Pierre-Étienne Crassous, 'Quanto majus sit spontaneae quam inoculatae variolae', *Quaestiones medicae 12*, 24–6 July 1760 (Montpellier, 1760), Q. 7, pp. 16–18. This was a diss. sustained for a doctoral chair. The first Montpellier student known to have supported inoculation in a dissertation was Joseph Galtier, 'De prognosi medica ex necrologis eruenda' (1762), in BFMM Printed Books 275005, vol. ii, no. 14.

[234] viii. 755–81 (a signed article). Voltaire had promoted smallpox inoculation in the eleventh letter of his *Lettres philosophiques ou lettres anglaises*, ed. G. Lanson (2 vols.; Paris, 1915) (1st pub. 1734); he had been a victim himself in 1723.

[235] J. B. Bo, 'De variolis' (1769), in BFMM Printed Books 275005, vol. iii, no. 11. This dissertation extols the role played by Tronchin in defusing prejudice.

[236] Thus, according to Crassous, referring to the findings of the English physician James

actually originated from the campaign to promote inoculation throughout Europe. Whatever their accuracy (and this was debated then as now), the results of the statistical surveys were compelling to a generation of physicians exhorted to build their medical practice on the evidence of observation. Physicians for the first time felt that smallpox could be conquered by inoculation.[237] The physicians' problem was to convince the general public to take up the same optimistic and objective attitude and base judgements on probabilities not certainties. This was not easy in an age where there was still little understanding of statistical methods outside the community of experimental philosophers. Although the general interest in child care made smallpox a matter of burning concern, contemporary mores tended to work against the popularization of inoculation. Arguably, parents became over-protective about their offspring and refused to subject them to the possible risks attendant upon inoculation, however small.[238]

The support for smallpox inoculation from the 1750s marked a new stage in the physicians' promotion of hygiene. The campaign until then had been primarily built around a series of negative prescripts. This was a prophylaxis of avoidance, one which still had an affinity with the sixteenth- and seventeenth-century counsel that the best way to beat the plague was to flee. As much of the advice, too, had a moral dimension (Parisians died of apoplexy because they were greedy), the physicians were preachers as much as counsellors, purveying health preservation in the form of a medical ten commandments. The support for smallpox inoculation and the optimistic belief that the disease could be conquered marked the dawning of a new era, one in which the hygiene campaign would become much more positive. Significantly, smallpox inoculation was not

Kirkpatrick, in his *The Analysis of Inoculation* (London, 1754), the mortality rate among those inoculated was 8 in 1,000: cited in Crassous, n. 233, above. Morisot de Landes, citing studies by other British physicians, claimed a mortality rate of 2 per 1,000: see n. 232 above, p. 9. François Boissier de Sauvages, equally quoting British, but different, sources, noted that 1 out of 61 died from inoculation against 1 out of 7 who contracted the disease normally. On another occasion, Sauvages noted as a result of his own investigations that the mortality-rate of natural smallpox victims could be even greater: in the epidemic of 1752 at Montpellier, of suckling infants who caught the disease, one half died, while of those under five on solids, three quarters did so: see AD Hérault 10F 51, Boissier de Sauvages, 'livre de raison', *sub* section on diseases, fos. 14 and 86^{r}.

[237] Cf. the optimistic endorsement given to inoculation by the Montpellier student J. B. Richard in 1764, although somewhat sceptical about the accuracy of the statistics: 'De variolarum extirpatione quaerenda primum; illique subnectenda variolarum insitione?': BFMM Printed Books 275005, vol. ii, no. 28.

[238] There was also the fact that children were seldom inoculated before the age of 7. By that time many (if not most) children who were going to have the disease would have had it (the danger years were supposedly 3–4: see Galtier's diss. cited above, n. 233). Boissier de Sauvages's children all had smallpox before they were old enough to be inoculated (see AD Hérault 10F 51, *sub* heading 'Histoire de mes enfants', no pagination). Hence many people must have thought that there was little point in subjecting their children to the risk of inoculation if they had passed the really dangerous age.

the only prophylactic on the market in the second half of the eighteenth century. In the last decades of the Ancien Régime figures inside and outside the corporative medical community claimed to have invented *préservatives* for a variety of diseases, especially venereal complaints.[239]

The existence of a more positive hygiene campaign on the eve of the Revolution is further evinced by the novel emphasis on public health. Before the 1760s the physicians' interest in public health had been limited to suggesting measures that might be taken by the municipality or the state in time of plague. They made no attempt to argue that the state should take an active role in health care, either by compelling obedience to hygienic rules or funding projects to improve the environment. Health care was perceived as an individual responsibility. There was no public-health programme in the *Encyclopédie*, for example, a work conceived in the early 1750s, if only finally published fifteen years later.[240] After 1760, however, the growing influence of German cameralist ideas in government and Parisian circles, especially with the arrival of Marie-Antoinette and her entourage at court in the early 1770s, encouraged a number of physicians to interpret their hygienic role more widely. In the last two decades of the Ancien Régime physicians began to form themselves into a public-health pressure group, dedicated to advising the government on how to clean up the environment. City-dwelling physicians now had the additional responsibility of urban environmental trouble-shooter, as the Lyons doctor Gilibert made abundantly clear in 1771.

> It is from [the physicians] alone that the magistrates will learn the art of making the great cities healthy. They will cause them to grasp the fatal effects of the unfortunate location of cemeteries, slaughter-houses, manufactures; they will show them the way to disinfect houses, hospitals; they will make them feel the importance of regulation concerning adulterated goods [*les denrées falsifiés*]; they will explain the diseases that all these causes could produce and the means to prevent them.[241]

F. The Enlightenment Physician as an Ideal

As is clear from the developments outlined in the previous sections, the eighteenth century witnessed the evolution of a new concept of the learned physician. Graduate physicians still had to have studied for six years or more in a *collège de*

[239] Cf. the antivenereal wine of the Paris physician Guilbert de Préval. He was ejected from the Paris college in 1771 on the grounds that his 'invention' encouraged immorality: see below Ch. 10, Sect. B.

[240] The point is well made in Coleman, 'Health and Hygiene in the *Encyclopédie*', esp. 413–18. Coleman explains this deficiency too cavalierly with reference to the bourgeois mentality of the age.

[241] *Anarchie médicinale*, i. 185. Developments in public health in 18th-cent. France are explored fully below, Ch. 12, esp. Sect. C.

plein exercice to gain both a written and oral fluency in Latin, for the language of the faculty classroom and the examination hall had scarcely altered since the reign of Louis XIV.[242] Nevertheless, they were now expected, in addition, to be good stylists in French and to possess a reading knowledge of several modern European languages, especially Italian, German, and English, if they were to keep abreast of current medical knowledge.[243] Graduate physicians, too, still had to be men of science, whose detailed knowledge of medical theory distinguished them from the subordinate members of the corporative medical community and the horde of untrained healers. From the mid-eighteenth century, however, this medical science was very different from the ideology traditionally inculcated in the faculty schools. No longer aprioristic and dogmatic, it stressed medical ignorance rather than certainty, and vaunted experience above rationalization, regardless of the vitalist or mechanist bias of its professorial exponent.

Above all, graduate physicians were supposed to have a much higher profile in the wider community. Although physicians were still expected to place great emphasis on their private patients, visiting them frequently and giving them optimum care,[244] the range of the learned practitioner's professional activities had been greatly expanded. Traditionally, graduate physicians had acted as general practitioners to the social élite who had contracted respectable diseases. On the eve of the Revolution, the image of the good physician was of a practitioner who intervened in the treatment of all diseases, however unsavoury, was a specialist in gynaecology and paediatrics, and left his well-to-do patients at the drop of the hat to oversee the care of the rural poor struck down by epidemics. At the same time, he had to be able to act as a personal hygienist and environmental whistle-blower, while spending any leisure time that remained writing up case histories and collecting meteorological data to aid the progress of medical science. The Enlightenment physician was perceived as a busy man, dedicated to improving humanity. According to the Paris-educated but Reims graduate Pierre-Jean-Georges Cabanis (1757–1808), writing in 1788, the new physician no longer occupied a terrain that was distinct from and inferior to the other two

[242] Some medical courses were given in French, but never the core lectures in theoretical medicine.

[243] See the comments in Gilibert, *Anarchie médicinale*, i. 36–44. Tuition in French style was given in the colleges from the mid-18th cent., but tuition in other modern languages was only offered as an extracurricular activity: see Brockliss, *French Higher Education*, ch. 3.

[244] Theorists as divergent as Hecquet and Gilibert followed their 17th-cent. predecessors in insisting that physicians should limit the number of their private patients to ensure they gave the best treatment. Hecquet, *Brigandage de la médecine*, 21, believed that physicians should have no more than ten patients a day, the number recommended by Hippocrates; Gilibert, 'Plan de recherches sur l'art de conserver la santé des enfans', in *Anarchie médicinale*, iii. 281, agreed but thought only five new patients should be taken on each day. Given the commercialization to which medicine was subject in the 18th cent., this must have been a pious hope: see below, Ch. 10, *passim*.

traditional professions: 'In some respects the *profession* of medicine is a type of priesthood; in others, it is a true magistracy.'[245]

This concept of the enlightened physician, of course, was still an ideal on the eve of the Revolution—after all, it had only been fully articulated in the 1770s and 1780s. Yet, it was an ideal that had already been successfully disseminated among the new generation of graduate physicians, thanks to its institutionalization in the Royal Society of Medicine, and the sterling propaganda efforts of its secretary Vicq d'Azyr. Like other royal academies in France, the Society quickly published its own *mémoires* or transactions, in which the research activities of its Parisian and corresponding members could be publicized and given institutional approval. More importantly in this context, Vicq used the Society's transactions as a vehicle for specifically promoting the concept of the enlightened physician through the publication of idealized *éloges*, or obituaries, of dead members. Members of the Society by definition belonged to the advance guard of the new medicine. Their lives, then, could be easily made to serve as professional role models.[246]

In the period 1776 to 1789 Vicq immortalized fifty members of the Society, nearly all physicians, both French and foreign. All were shown to have demonstrated in their lives the experientialism, openness, and wide-ranging commitment expected of the new physician. Above all, they were presented as devoted friends of humanity: half were said to have met their deaths at the disease-face, fighting epidemics in the deepest countryside on behalf of everyman. Typical was Hugues Maret, struck down by a fever, at Fresne-Saint-Masmes (a village near Vesoul). Even on his death-bed and in delirium he thought only of the epidemic's victims. Vicq d'Azyr imagined the hero's final thoughts:

Perhaps then he recognized the fullness of the sacrifice which was about to be accomplished, perhaps he also remembered that he had been a citizen before being a father: for what other sentiment but that of our duty, what other force but that of a great thought

[245] 'Du degré de certitude de la médecine', in id., *Œuvres complètes* (5 vols.; Paris, 1823), i. 522. This work was not published until 1798. Cabanis was a leading light of the group of intellectuals known as the Idéologues who played a dominant role in educational, social, and medical reform in the second half of the 1790s and early 1800s: see below, Conclusion, Sect. D. For his pre-Revolutionary medical education, see M. S. Staum, *Cabanis: Enlightenment and Medical Philosophy in the French Revolution* (Princeton, 1980), ch. 4.

[246] It is possible that Vicq took a leaf from the book of the secretaries of the Académie des Sciences, who had similarly used the format of the *éloge* to popularize an image of the natural scientist: see Paul, *Science and Immortality: The Éloges of the Paris Academy of Sciences.* The *philosophe* Condorcet, secretary in the 1780s, also helped Vicq to develop the picture of the ideal physician. Cf. his rather jaundiced account of Michel-Philippe Bouvart (1711–87), who stubbornly resisted all innovation in medicine, and still used heroic remedies, with his positive evaluation of Tronchin (d. 1781): see Jean-Antoine-Nicolas Caritat, marquis de Condorcet, *Œuvres*, ed. A. Condorcet O'Connor and M. F. Arago (12 vols.; Paris, 1847–9), ii. 505–10 and iii. 280–8.

can serve as a support at those moments of final decline and agony when the last memories which survive must be those of the good and ill we have done?[247]

As a result of Vicq's efforts in particular, most graduate physicians emerging from the faculties in the 1780s would thus have known what was expected of them, if few can have copied Cabanis, who graduated in 1784, then for the next five years threw himself ostentatiously into treating the poor of Auteuil, a village near Paris.[248] But even inculcating the minds of faculty graduates with the ideal of the enlightened physician was insufficient for the ambitious vision of the medical reformers to be successfully realized. Figures such as Gilibert, Tissot, and Vicq wanted the enlightened physician to dominate and control the entire field of medical practice: the learned physician was to retain his traditional role as a private practitioner but was to embrace the novel and crucial function of a medical administrator; he was to become the leader and supervisor of a team of trained subordinates who between them would monopolize medical practice. However, this grandiose vision of power could only be fully achieved if a number of conditions were initially met.

In the first place, the number of physicians had to have expanded considerably. Not only would the new physician have much more to do than his sixteenth- and seventeenth-century predecessors, now that the job description had changed dramatically, but the threefold rise in the size of the bourgeoisie over the eighteenth century suggested that there would be a much larger call on the community's traditional services. Secondly, there would also have to be a growth in the size of the subordinate branches of the corporative medical community, for the surgeons especially, albeit better-trained and perhaps given a new title, were to bear the brunt of the campaign to bring medical care to the people. It was necessary, too, that this expansion of the corporative medical community had occurred without any undue stress to its traditional hierarchical organization. The corporative physicians' ability to dominate the arena of medical practice depended greatly on their corporative colleagues' willingness to subject themselves meekly to an even closer scrutiny by their medical superiors. As we saw, there had always been some friction between the different branches of the corporative community, but the situation never got out of control in the sixteenth and seventeenth centuries, partly because surgeons and apothecaries were largely left to their own devices.[249] They were really only subject to physician-control in towns with communities of physicians, and even then only to a restricted degree, given that physicians left large areas of even élite

[247] Vicq d'Azyr, 'Éloge de Maret', in id., *Œuvres*, iii. 135. The meaning of Vicq's *éloges* is discussed in Daniel Roche, 'Talents, raison et sacrifice: L'Image des médecins des lumières d'après les éloges de la Société Royale de Médecine (1776–1789)', *Annales ESC*, 32 (1977), 866–86.

[248] Staum, *Cabanis*, 9.

[249] Intercorporate relations are discussed above, Ch. 3, Sect. E.

medical care directly to their subordinates. The new concept of physician-power left far less space for individual initiative on the part of surgeons, apothecaries, or midwives, yet could only be made a reality if corporative relations were friction-free. Its successful realization depended on some way being found of reducing the independence of surgeons and apothecaries without aggravating intercorporate relations.

At the same time, and just as importantly, the French patient and his or her family had to have accepted the physicians' extended medical agenda. It would be no use having a nationwide corporative medical community in place, if a large proportion of the nation refused its ministrations. Acquiescence, admittedly, might be forced, and there is no doubt that the physician-reformers looked to the crown to support their ambitions by outlawing alternative medicine. Thus in 1754 Brouzet, in the name of the public good, called on the authority of the law to give physicians a monopoly in treating children's diseases.[250] But, however supportive the state, its puny reach in eighteenth-century France could never have assured patient compliance. The physicians had to win the hearts of the nation, if physician-power were to become a reality. This, though, was unlikely to prove an easy task. As was argued in Chapter 5, the poor almost certainly preferred unlearned to learned healers for social and cultural reasons.[251] The physician or his trained deputy in the countryside, then, was not likely to find a large clientele among the people simply because he was public-spirited enough to enter a peasant's hovel; even the relationship between the peasantry and the clergy began to break down as soon as the parish priest was an educated seminarian. Empirics, therefore, were going to be difficult to drive from the field.

This was all the more true in that the new experientialist medical philosophy of the faculties tended to legitimize the existence of empirics in a way traditional rationalist medicine had certainly never done. If, as medical professors insisted, therapeutics was a science that had scarcely begun and was based purely on experience, what distinguished the faculty physician from the unlearned empiric? Even if the physician's therapeutic methods remained distinctive, empirics might still be privy to useful knowledge, and utility, after all, was the only criterion in the Newtonian medical moment by which a physician's competence could now be assessed. Learned and unlearned practitioners were therefore ideologically much closer together than they had ever been.[252]

[250] *Essai sur l'éducation médicinale*, p. xx. [251] See above, Ch. 5, Sect. A.

[252] Barthez implicitly admitted this when he told his students that most of the inherited therapeutic baggage of faculty medicine was not only useless but actually inhibited real medical advance. For this reason, he went on in a Rousseauist vein, 'savages who have not had any of their faculties enfeebled by art, have themselves natural and surer resources [against disease] than we do'. See his 'Cours de thérapeutique', BM Montpellier MS 256, fo. 16.

This fact potentially jeopardized even the physicians' control over their traditional clientele, the social élite. As a result of the demographic, economic, and socio-cultural changes outlined in Chapter 6, this was an age in which the élite, more than ever before, demanded relief from its diseases: the affluent wanted to experience a cure, not to take comfort as they expired in the fact that they had obeyed the tyranny of custom, that evil genie in the Age of Enlightenment. The affluent, then, might easily be tempted into the arms of an empiric whose cure seemed to work. And what would the élite make of the new *médecine expectative*? Would it comfort the afflicted to be told that acute diseases cured themselves, while most chronic diseases were at best only treatable with patience and care and perhaps beyond the bounds of art altogether?[253] Furthermore, in a society where wealth was fast becoming the touchstone of respectability, would it be possible for physicians to retain the loyalty of their traditional clients, if they began to slide down the economic scale, or, more importantly, were no longer considerably more affluent than many of their subordinates or many empirics?

It was an ominous sign for the eventual triumph of the physicians' vision that the Enlightenment's leading spokesmen did not always share the hysterical intolerance of most corporate physicians towards empirical healers. In 1772 Gilibert, in his generally acerbic account of the state of French medicine, attacked empirics mercilessly; he had conducted his own poll, he claimed, and among *le peuple*, only one-quarter sought help from legitimate practitioners. He was willing to accept that charlatans occasionally effected cures and that medicine had always had an empirical element. None the less, a few successes could never make up for the daily harvest of death.[254] The *philosophe* Diderot, in contrast, addressing Catherine the Great in the same year was far more sanguine.

> I have sometimes thought that the charlatans who inhabit the suburbs of the great towns were not so pernicious as supposed. It is *empirisme* which has given birth to medicine, and it can only really progress through empiricism ... The audacious empiric to whom a patient addresses himself when he has been abandoned by a faculty doctor, either kills him or restores him to health and gives back the enjoyment of life to those who looked after him.[255]

Obviously, establishing corporative physician-power, even if the Revolution had not intervened, would have been far from straightforward. In the following three chapters we will show how little in fact any of these conditions had been met by 1789. Chapter 8 examines the overall organization and character of the corporative medical community in the eighteenth century, and reveals that

[253] The second viewpoint was expressed by Arnulphe d'Aumont in the *Encyclopédie*, art. 'hygiène', vii. 385. Obviously, his was a more extreme view of non-intervention than Gilibert's cited above, Sect. C.

[254] *Anarchie médicinale*, esp. i. 241–73.

[255] 'Plan d'une université', 499.

though changes occurred in its structure they were insufficient to turn the institution into an effective instrument of nationwide medical control. Chapter 9 examines one part of corporative medicine in detail, surgery, and shows that the growing confidence and crown-encouraged independence of the surgical communities in the large towns, completely destabilized the traditional corporative hierarchy and seriously threatened any possibility of physician-power along traditional corporative lines. Chapter 10 looks at the fortunes of unlearned medical practice in the eighteenth century, and reveals that empirics, far from losing their grip, were extending their influence over medical practice through clever manipulation of the new secularized culture and their ability to develop a nationwide market for their remedies. On the eve of the Revolution, then, if the faculty physicians had produced a new medical ideology which suited the utilitarian, secular mood of the time as well as their own professional interests, they had certainly failed to create the conditions in which they could dominate the arena of medical practice in the way they desired.

8

The Corporative Medical Community in the Eighteenth Century[1]

A. The Corporative Map

The French corporative medical community which had been gradually constructed over the sixteenth and the first half of the seventeenth centuries remained legally intact until the French Revolution when it was swept away along with the myriad other corporative institutions of Ancien Régime society in March 1791.[2] As we have seen in an earlier chapter, the French corporative medical community in 1700 consisted of as many as forty-three colleges of physicians, 300 corporations of surgeons, and probably a similar number of apothecaries' corps.[3] In the eighteenth century this underwent little substantial change: the community remained decentralized, hierarchically organized in three branches, urban-based, and largely self-governing. The main structural change was a functional one. In the course of the century surgeons in most big towns detached themselves from their barber cousins and formed a separate corps, in imitation of their apothecary colleagues who had emancipated themselves from the spicers at an earlier date. This development occurred at Paris in 1743 when the corporation which had been formed in 1655 by the amalgamation of the barber-surgeons and the surgeons of Saint-Côme was purged of its barbering element and became again an exclusive company of surgeons.[4] Outside the large towns, however, most apothecaries and surgeons continued to double as spicers and barbers respectively.

Just as the corporative medical community underwent minimal structural alteration in the eighteenth century, so it did not significantly expand in institutional volume. Physicians in several non-collegiate towns, such as Langres and

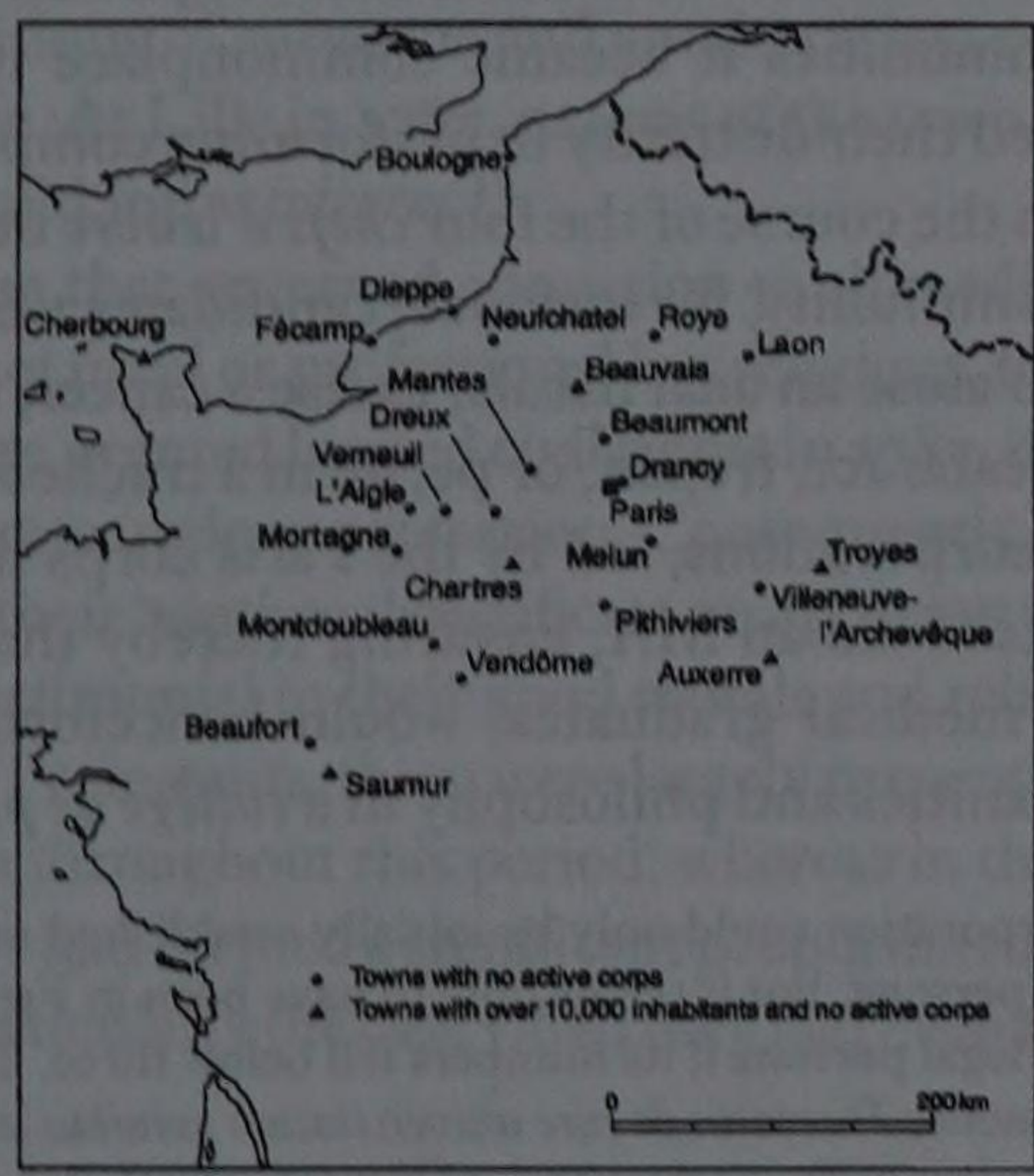
[1] The best existing account of the corporative community in the 18th cent. is M. Ramsey, *Professional and Popular Medicine in France, 1770–1830: The Social World of Medical Practice* (Cambridge, 1988), 17–70.

[2] See below, Conclusion, Sects. C and D, for an analytical account of the fate of the corporative community during the Revolutionary and Napoleonic eras.

[3] See above, Ch. 3, Sect. B.

[4] T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980), 67. In the Paris case, the development incurred the wrath of the Faculty of Physicians: see below, Ch. 9, Sect. D.

Périgueux, seem to have successfully organized themselves into informal corps, but only one new college of physicians was founded—at Nancy in 1752 (at this date not completely a part of France).[5] Admittedly, the number of communities of surgeons rose from three to four hundred,[6] but this development must have been largely offset by the number of apothecaries' corporations which ceased to have an active, legal life because the number of resident pharmacists had dropped below three. By the 1760s and 1770s this had happened in towns as large as Chartres and Beauvais with populations of 12,000–13,000, so it can be assumed that in many smaller places the apothecaries' corps had also become legally extinct (see Map 8*a*).[7]



MAP 8*a*. Towns in northern France 1749–1789 with no active apothecaries' corps

Note: Information is for a single year; inactive corps may therefore have lain dormant for only a few years.

Source: BN MS Fr. 14821, 'Registre de réception des pharmaciens du collège de Paris (1763–91); O. Hufton, *Bayeux in the Late Eighteenth Century: A Social Study* (Oxford, 1967), 32 (Cherbourg); P. Rambaud, *La Pharmacie en Poitou jusqu'à l'an XI* (*Bulletin et Mémoires de la Société des Antiquaires de l'Ouest*, 2nd ser., 30; Poitiers, 1906), 540 (Troyes).

[5] 'Lettres patentes du roi portant établissement d'un collège royal de médecine à Nancy' (1752), in BFMP TMP in 4°, xi, no. 156. For informal corps, see BFMM AFMM, F 57 (unnumbered collection of letters, 1772), letters 24 July and 28 Mar. by Montescot and Germillac. Lorraine was only formally incorporated into France in 1766.

[6] T. Gelfand, 'A "Monarchical Profession" in the Old Régime: Surgeons, Ordinary Practitioners, and Medical Professionalization in Eighteenth-Century France', in G. L. Geison (ed.), *Professions and the French State 1700–1900* (Philadelphia, 1984), 154–5.

[7] BN MS Fr. 14821, 'Registre de réception des pharmaciens du collège de Paris depuis l'année 1763 jusqu'à l'année 1791'. The register contains a list of apothecaries who came to Paris to gain their mastership because the town in which they dwelt had either no corps or a defunct

As in the sixteenth and seventeenth centuries, the fiscal and educational demands placed upon applicants to individual medical corps depended largely on the size and importance of the town in which they were located. By and large, corps in the largest towns continued to restrict entry to the well-heeled and the well-qualified; indeed, in some cases access to such corporations became more onerous as the eighteenth century progressed. By the 1780s it cost 7,000 *livres* to become a Paris physician and 3,000 *livres* to be admitted to practise at Lyons and Reims.[8] Even entry to surgical communities in prominent provincial towns could be expensive: Avignon and Montpellier seldom charged less than 1,000 *livres*.[9] And it was not just the fees that became more burdensome, for the entrance examinations were also often made more rigorous. Thus, in the case of the élite surgical communities it became commonplace to insist that future members demonstrated their dexterity in performing complex as well as simple surgical operations. In the course of the four *chefs d'œuvre* demanded for admission to the Avignon community, for instance, candidates were repeatedly asked to show their ability to close an anal fistula, excise a cancer, rectify a hairlip, cut for the stone, couch a cataract, trepan, or perform a tracheotomy.[10] In addition, a number of surgical corporations, led by the Paris corps from 1743, began to demand that candidates held an MA, ensuring thereby that members of their community, just like medical graduates, would henceforth have studied the Latin and Greek humanities and philosophy in a *collège de plein exercice*.[11]

corps. In Roman law, a corporation could only be initially established as a legal personality if it consisted of three or more persons, but it seems only to have been in French law that a corporation, once founded, lost its legal persona if its numbers fell below three. The Roman law position is outlined in Nicolaus Losaeus, *Tractatus de iure universitatum omnibus legum studiosis, & in foro, & in scholis versantibus maxime utilis, ac necessarius* (Venice, 1601), 11–12. We are indebted to Andrew Hegarty for this reference.

[8] A. Lelage, *Histoire de la thèse de doctorat en médecine* (Paris, 1913), 128: a sum of 6,685 *livres* was paid by the Paris graduand Vallet de Viniville in 1789; Bordeu paid 6,000 *livres* in mid-cent.: see Théophile de Bordeu, *Correspondance*, ed. M. Fletcher (4 vols.; Pau, 1977–9), ii. 69–70. AD Hérault 10F 51, François Boissier de Sauvages, *livre de raison*, under the heading 'coût des grades', n.p., cost *inter alia* of joining the Lyons college. BM Reims MS 1084, fos. 24–6, memorandum on the cost of gaining a 'grand-ordinary' as opposed to a 'minor-ordinary' degree; only by taking the grand-ordinary doctorate at Reims could a candidate gain an automatic right to practise in the city: for the three types of degree bestowed at Reims, including a 'quicky' degree for foreigners: see above, Ch. 3, Sect. C.

[9] BM Avignon MS 2289, 'Livre de la réception des maîtres chirurgiens [Avignon] 1682–1789', *passim*: on 27 Mar. 1786 one Blaud paid 1,500 *livres* to be admitted; L. Dulieu, *La Chirurgie à Montpellier de ses origines au début du XIXe siècle* (Avignon, 1975), 132–3; AD Hérault 10F 51, Boissier de Sauvages, *livre de raison*, n.p.: Boissier de Sauvages claimed in the mid-cent. it cost 1,800 *livres* to become a master surgeon at Montpellier.

[10] BM Avignon MS 2289, *passim*: the reception book gives details of the operations demanded of each applicant. Dulieu, *Chirurgie*, 99. Some of these operations would not have been attempted before 1700; it reflected the growing expertise of the élite of French surgeons: see below, Ch. 9, Sect. A.

[11] Gelfand, *Professionalizing Modern Medicine*, 67 ff.; cf. also Dulieu, *Chirurgie*, 110–11. This was a status-enhancing measure: see below, Sect. F.

Yet though many corps in the large towns felt the need to raise the entry requirements over the eighteenth century, the general rule was not so demanding. The cost of a medical degree often remained low, even in faculties where the doctorate gave an automatic right to practise in the vicinity. Thus, the doctorate at Montpellier never seems to have cost more than 300 to 400 *livres*.[12] Equally, many non-faculty colleges seem to have levied only a relatively small entrance charge. From 1707 all colleges of physicians were permitted by the crown to demand 150 *livres* from applicants, but even this was not always solicited.[13] The college of physicians at Nîmes, for instance, does not seem to have charged applicants until 1743, when it attempted (initially without success) to demand a 400 *livres* fee because the corps was heavily in debt.[14] Not surprisingly, then, entrance to corporations of surgeons and apothecaries, even in large cities, was not always expensive. At Lille in 1767, natives of the town could be received into the apothecaries' guild for 120 *livres*.[15]

The one condition that governed admission to all medical corps in the eighteenth century was not fiscal or professional but religious, for from the early 1680s until Huguenots were granted limited civil rights in 1787, only Catholics could be members of a corporate trade or profession. Consequently, candidates had always to present a copy of their baptismal certificate on applying to join a corps, and frequently provide a testimonial to their good morals and religiosity signed by their local *curé*.[16] Fervent Protestants, then, were largely prevented from belonging to a medical corporation throughout this period, whereas in the sixteenth and seventeenth centuries they had formed a significant proportion of the corporative community. This was particularly the case when they had been trained abroad, like the

[12] See the figures in D. Julia and J. Revel, 'Les Étudiants et leurs études dans la France moderne', in eid. (eds.), *Les Universités européennes du XVIe au XVIIIe siècle: Histoire sociale des populations étudiantes*, ii (Paris, 1989), 281. AD Hérault 10F 51, Boissier de Sauvages, *livre de raison*, n.p., gives 350 *livres* for a Montpellier doctorate.

[13] Isambert, xx. 515, art. 32, from the 1707 Edict of Marly: for this important royal declaration on the organization of medicine, see below, Sect. B.

[14] BM Nîmes MS 425, fos. 73^v–77^r, college minute-book, 9 July 1743 and 18 Apr. 1744. Before 1743 the college had only expected a new member to give a banquet and present his colleagues with a pair of gloves.

[15] G. Bossenga, *The Politics of Privilege: Old Regime and Revolution in Lille* (Cambridge, 1991), 118. In a general *règlement* governing surgery in 1730, discussed below, Sect. B, the state laid down the fees to be paid for a mastership in surgery that brought admittance to a corporation; even in the largest town this should have cost no more than 350 *livres*; in charging more, prestigious corps were flouting the law: see *Statuts et règlemens généraux pour les maîtres en chirurgie des provinces du royaume*, ed. R. Le Blond d'Olblen (5th edn. Paris, 1772), 42–4, art. lxv.

[16] As late as 1790 one Augustin Garros of the diocese of Auch who wanted to become a master apothecary presented to his Paris examiners a certificate of good morals from his local Nantais *curé*: see BN MS Fr. 14821, fos. 47–8. It should be noted that this religious discrimination never applied to Lutheran Strasburg; at the time of the city's incorporation into France in 1681 the civil rights of its Protestant inhabitants were guaranteed.

encyclopédiste chevalier Jaucourt, who had qualified at Leiden, for only physicians with a degree from a French faculty were allowed by law to practise in urban France.[17] It was probably only in towns with a powerful underground Huguenot community that Protestants continued to be found in medical corporations, and even then they would have been reluctant to trumpet their allegiance too openly. One such was the Nîmois Pierre Baux. Baux was the son of another Protestant Nîmois physician, Pierre Baux the Elder (1679–1732), who somewhat peculiarly had converted to Calvinism after the Revocation of the Edict of Nantes. Officially, both were Catholics but the religious affiliation of the Baux family is clear from the correspondence between Pierre Baux the Younger and his erstwhile student friend, the Montpellier nosologist François Boissier de Sauvages.[18]

Growing religious tolerance, of course, was a hallmark of the age, so it is possible that the religious credentials of the candidate became less important as the century wore on, especially after 1750 when active persecution of the church 'in the desert' all but ceased.[19] It can be assumed, too, that the coterie of physicians who were the leading figures in the medical Enlightenment, discussed in Chapter 7, took a relatively relaxed view of confessional loyalties in the final decades of the Ancien Régime. It would be a mistake, however, to believe that the corporative medical community as a whole had become a hotbed of deism or religious indifference by 1789. There are plenty of examples of pious medical men throughout the century and the community was probably not much more alienated from traditional religion on the eve of the Revolution than the educated élite in general. Interestingly, it was in the early eighteenth century, not later on, that the episcopate seems to have felt that the corporative community was not giving the support to the Church that it should. On 8 March 1712 the ageing and pious Louis XIV was pressurized by the neo-Jansenist archbishop of Paris, Louis-Antoine de Noailles, into issuing a declaration demanding that medical practitioners warned their patients to confess on pain of facing the ultimate sanction of forfeiting their right to practise. According to the royal decree, Louis's intervention followed repeated but unavailing attempts by the hierarchy to command compliance with the Church's decrees; the archbishop had himself issued ordinances to this effect in March 1707 and again in February 1712.[20] As

[17] Isambert, xx. 514, art. 26 (Edict of Marly).

[18] The correspondence lasted for thirty years, 1727–57, and is to be found in BM Nîmes MS 414: see esp. fo. 62: Boissier de Sauvages to Baux, 3 Feb. 1736, where Boissier de Sauvages discusses the merits of Swift's *Tale of a Tub*. The authors are engaged in producing an edn. of Sauvages's correspondence.

[19] See the recent account in G. Adams, *The Huguenots and French Opinion 1685–1787* (Waterloo, Ont., 1991).

[20] Isambert, xx. 573–4, 'Déclaration portant que les médecins seront tenus d'avertir leurs malades attaqués de maladies graves de se confesser'. Registered in the Paris Parlement 17 Apr. 1712.

a similar criticism was not repeated thereafter, presumably the corporative community performed its religious duty satisfactorily in the spiritually less demanding reigns of Louis XV and XVI (unless, of course, the declaration was a dead letter from the start). Obviously committed free-thinkers did exist within the community, such as La Mettrie, but on the margins, and for every deist or materialist there must have been two or three passionate Jansenists, like the Paris physician Philippe Hecquet.[21]

In an age of economic, social, and cultural change, then, the organization of the corporative medical community remained largely unaltered. As will be seen in Section B, changes did occur in the course of the century, but the changes brought greater standardization and a greater degree of state control, not wholesale restructuring. At no time before 1789 was the corporative medical community anything other than a congeries of localized bodies claiming a legally enforceable monopoly of a branch of medical practice over a limited geographical area.

B. Standardization and State Control

In the sixteenth and seventeenth centuries, except in the case of certain peripheral provinces like Provence, the graduate physicians' monopoly over the practice of physic was legally limited only to towns where there was either a faculty or college of physicians.[22] Elsewhere, in theory, anyone could practise medicine, although in towns where there were communities of surgeons and apothecaries the local corps may well have refused to cooperate with unqualified physicians. This state of affairs, the result of the piecemeal construction of the corporate medical community, was remedied for the first time in July 1696. In that year the king issued an edict declaring that 'no one can practise medicine in any town of our kingdom, and in any form whatsoever, who has not been received as a doctor in one of our universities'. Henceforth anyone wishing to set up in practice in a non-collegiate town had to show his degree certificate to the local royal *officiers*, mayor, *échevins* (aldermen), or *consuls*. The 1696 declaration, however, was not just concerned with stemming unqualified practice. The king also claimed to be concerned that degrees were being given without due attention being paid to the prescribed length of studies. The edict, therefore, also demanded in future that no one could graduate in medicine unless he had an MA, had studied physic for four years, had performed the *actes* laid down in the

[21] See L. W. B. Brockliss, 'The Medico-Religious Universe of an Early Eighteenth-Century Parisian Doctor: The Case of Philippe Hecquet', in R. French and A. Wear (eds.), *The Medical Revolution of the Seventeenth Century* (Cambridge, 1989), esp. 193–6, and 206–18. Hecquet was a moderate Jansenist, opposed to the activities of the *convulsionnaires* of Saint-Médard in the 1730s.

[22] See above, Ch. 3, Sect. B.

statutes for admission to a degree, and had taken his licence six months after his baccalaureate.[23] Why the king should have chosen at this particular moment to introduce the first piece of truly national legislation about medical practice is unclear. The preamble referred to the solution of the problem of practice in Paris by the edicts of 1694 and early 1696. Since these edicts were the responsibility of the king's new premier physician Fagon, perhaps it was Fagon again who had encouraged his royal master to define more carefully who could practise medicine throughout the kingdom.[24]

The declaration proved a contentious document. Not only did it meet with criticism from faculties that only expected three years of study from graduands (and this included Montpellier), but it also exacerbated professional jealousies by encouraging the embittered to challenge the validity of colleagues' credentials in the courts. Thus an Avignon graduate, Jean-François Pache, who had graduated in 1699 and established himself at Fontenay-le-Comte in Poitou found himself denounced to the courts in 1706 by his fellow physicians on the grounds that he had not gone through the correct graduation procedure. As his colleagues had been initially perfectly ready to consult with him, Pache understandably smelt a cabal and got his Alma Mater to take up his case. The Avignon Faculty insisted that Pache had been properly examined, complained that the four-year rule would decimate its number of graduates, and maintained that other faculties were ignoring the royal declaration, especially Valence. '[Valence] does not demand any period of study and it is even perhaps the case that the capacity of those who are given degrees there is not examined with the same rigour and exactitude as happens at Avignon.'[25]

Pache and the Avignon Faculty lost the case before the Conseil d'état (the highest court in the land), but the general level of discontent must have encouraged the crown and its ministers to think again, for in March 1707 a much more comprehensive edict for the organization of medical practice was promulgated, known as the Edict of Marly.[26] On the one hand, this reiterated the prohibition of 1696 in a modified form. No one could practise in the future who was not a medical licentiate; the prohibition was extended to the country's *bourgs* as well as towns; and royal judges and seigneurs holding rights of high justice (i.e. the right to try capital crimes) were forbidden to allow unqualified individuals to breach the restriction by issuing special permits.[27] Even court physicians were

[23] Isambert, xx. 273–4, royal declaration of 19 July 1696.

[24] For the edicts of 1694 and Mar. 1696, see above, Ch. 5, Sect. E.

[25] BM Avignon MS 3193, fos. 5–9, undated MS account of the incident. Avignon graduates continued to face discrimination throughout the century. See the numerous instances documented in AD Vaucluse D 62, assorted medical documents 1703–80. In the 1700s Avignon was graduating some nine doctors p.a.: see Table 8*a*.

[26] Isambert, xx. 510–17, Edict of Marly.

[27] Ibid., arts. 26–8. The practice of medicine by the regular clergy was specifically forbidden.

submitted to the new requirement, for an additional clause demanded that court doctors would only be given letters of appointment once they had revealed where they had graduated.[28] On the other hand, the edict laid down in much greater detail the path that in future a physician would have to take to gain a medical degree.

Presumably as a result of the complaints, the length of time to be spent in the faculty schools was reduced from four years to three, provided that one year was passed in the faculty from which a degree was sought. This made perfect sense, for the differential costs in graduation between faculties (in part a reflection of the fact that many faculties were also medical colleges) meant that medical students in the eighteenth as in previous centuries frequently took their degree in the less prestigious faculties like Avignon, Valence, and Reims.[29] To prevent cheating, faculties were to introduce a system of quarterly inscriptions which would be kept in duplicate so that one copy could be retained by the local *parlement*.[30] Compliance was also encouraged by insisting that a percentage of the graduation fee would be paid each time that the student signed the matriculation register. In contrast, little attempt was made to regulate the actual content of medical studies, except to demand that all students before graduation had followed an anatomy and botany course and also a course in Galenic and chemical pharmacy. Faculties that lacked a botanical garden were ordered to take their students on *herborisations* (botany walks) in the countryside.[31] However, to make sure that wherever a student graduated the examinations were properly conducted, a uniform procedure was laid down that put an end (at least in part) to traditional faculty autonomy in this respect. At the end of each of the three years, students were to undergo a two-hour private examination, the third-year examination being on the whole of the course. Students would then have to perform a three-hour public *acte* (in the form of sustaining a dissertation) to become a bachelor, a four-hour one for the licence, and a five-hour one for the doctorate. Licensiands would also have to take an examination in *materia medica* (pharmaceutical materials), but they were now permitted to proceed to the degree after a (more realistic) gap of three months.[32]

[28] Art. 34. Another article required that court surgeons and apothecaries be either masters or have served for ten years in an army hospital.

[29] See Tables 3*a* and 8*a*. Reims, like Angers, offered a cheap 'minor ordinary' degree for those who did not intend to practise in the town, which cost 300 *livres*: see Julia and Revel, 'Étudiants', 280.

[30] A similar system had been introduced as part of the 1679 nationwide reform of the law faculties: see BN MS Fr. 15593, fos. 565–9: royal declaration, Apr. 1679.

[31] Already, then, there was official recognition that theoretical knowledge was insufficient for the good physician: for developments in practical medical training in the 18th cent., see below, Sect. C.

[32] Isambert, xx. 511–12, art. 14.

Louis XIV was also concerned to standardize the entry procedures to the surgical branch of the corporative community, for in February 1692, even before the reform of the physicians' training, he had legislated for a common system of apprenticeship.[33] Louis himself, however, went no further down this particular road. It was left to his successors to develop a standardized pattern of entry. That Louis XV's regime, doubtless under the influence of the court surgeons Georges Mareschal and François Gigot de La Peyronie (d. 1747), intended to implement a national system of regulation as soon as possible was made clear in 1723, even before the death of the regent, the duc d'Orléans.[34] In that year the young king ordered that the statutes of the recently erected community of surgeons at Versailles be given a general provenance and henceforth replace the existing statutes of all other surgical corps.[35] Whether this was intended as a permanent or stop-gap measure is unclear, but the decision caused a furore, for the Versailles statutes of 1719 peculiarly gave members of the community the right to treat internal as well as external maladies and to prepare internal medicines. It seemed, then, that the crown was granting surgeons everywhere the right to intrude on the domain of the physician and the apothecary.[36] As a result, despite the crown's insistence that surgeons should stick to their traditional last *pace* the 1723 declaration, a further regulatory edict was made inevitable, and this was duly promulgated (again from Marly) on 24 February 1730.[37]

The 1730 edict was as important for surgeons as its 1707 predecessor had been for physicians. Hitherto, as in the case of physic, there had been little legal restriction on the unqualified practising surgery outside towns endowed with a surgical corps (except where the local community had the legal right to oversee practice in the immediate vicinity). After 1730 all surgeons, even at village level, had to be masters, although the specific conditions that had to be satisfied to gain a *maîtrise* depended on where a surgeon intended to establish his *boutique*. The

[33] This was part of a general edict governing the organization of the surgical art. The length of the apprenticeship was fixed at two years and the journeyman's *stage* at four: see J. Barbot, *Les Chroniques de la faculté de médecine de Toulouse du XIIIe au XXe siècle* (2 vols.; Toulouse, 1905), i. 332–7; we have been unable to find a copy of the edict.

[34] Mareschal served as the king's premier surgeon 1703–33, when he was replaced by La Peyronie. As we will see below, the latter had an important influence on the development in surgery in the first half of the 18th cent.: see esp. below, n. 292.

[35] Royal edict of Sept. 1723, consequent to the establishment of a community of surgeons at Versailles in Mar. 1719: neither edict has been seen, but their contents are described in the works cited in nn. 36 and 37, below.

[36] Communities of apothecaries and colleges of physicians all over the country demanded that the statutes be revised: see [Julien de Prunay], *Mémoire pour le doyen & docteurs-régens de la faculté de médecine en l'université de Paris: Demandeurs ... contre la communauté des maîtres barbiers-chirurgiens* (Paris, 1730), 12–13.

[37] It was registered by the Paris Parlement on 13 Aug. 1731. The text is to be found in *Statuts et règlemens généraux*, 12–66. According to the editorial preamble of the 1772 edn. (p. 4) the 1723 edict was intended to be provisional.

edict divided surgeons into three separate categories: town surgeons who belonged to a community; town surgeons who did not; and surgeons who practised in *bourgs* or villages. The entrance qualifications in each case, apart from the demands that candidates show evidence of attachment to the Catholic faith and that they be 22 years of age,[38] were different. No one could become a member of a surgical corps unless he had been an apprentice for two years, a journeyman for three,[39] and had been awarded his *grande maîtrise* after a series of nine examinations which included a practical test of his capacity to perform complicated surgical operations, such as amputation, lithotomy, and trepanning.[40] No one could practise surgery in a non-community town unless he had been an apprentice for two years, a journeyman for three, and had gained a *maîtrise* bestowed after two three-hour orals exploring his knowledge of anatomy and minor surgical operations.[41] Finally no one could serve as a surgeon in a *bourg* or village who had not been an apprentice for two years, a journeyman also for two, and who had not been awarded a *petite-maîtrise*, an accolade obtained after a single three-hour oral examination.[42] The division of the licensed community of surgeons into three parts, it should be said, only confirmed the tendency that we have already noticed[43] for the entry qualifications demanded of surgical candidates to be more or less rigorous according to the candidate's intended place of residence. Nevertheless the 1730 edict reinforced this tendency by accommodating it within a national framework. It also, of course, guaranteed that henceforth the élite surgical corps in the big cities would become more like the medical faculties, not simply examining prospective entrants, but awarding *maîtrises* and *petites-maîtrises* to wandering journeymen who might eventually settle down in another community or no community at all. The *maîtrise* was becoming like a medical degree, not necessarily associated with the right of entry to a particular surgical community.[44]

This development was consolidated in 1772 and 1784 when the 1730 legislation was refined. Whereas later Bourbon monarchs seem to have been satisfied with the 1707 Edict of Marly and made no further attempt by statute to organize the training of physicians, this was not the case where the surgeons were

[38] Sons of masters only had to be 20: *Statuts et règlemens généraux*, 28, art. xxxii.

[39] Only a two-year *stage* was demanded of a journeyman who had served his time in a frontier hospital or as an army surgeon, and only a one-year *stage* if passed in the Paris Hôtel-Dieu or Charité hospital or in the Invalides: see *Statuts et règlemens généraux*, 29–30, art. xxxii.

[40] Ibid., 28–39, arts. xxxii–lxii. [41] Ibid. 44–5, art. lxvi.

[42] Ibid. 45–6, art. lxvii. [43] See above Ch. 3, Sect. C, and Ch. 8, Sect. A.

[44] The 1730 edict theoretically permitted master-surgeons of one community to migrate to another without being examined again in detail and at a reduced fee: see *Statuts et règlemens généraux*, 46–7, arts. lxviii–lxix. Migration became more difficult from 1750 when the king declared that in such cases candidates had to have served for ten years in the town in which they had originally been received: ibid. 8.

concerned. In 1772[45] the crown attempted to introduce a universal pattern of training, wherever a surgeon intended to practise. The need to be an apprentice was abolished for all types of surgeon, thereby elevating surgery to the rank of a liberal profession and ending its traditional association with the manual arts. Instead all candidate-surgeons were expected to serve as assistants to master-surgeons for a three-year term or serve a three- or two-year stint in a frontier or Paris hospital. In addition, they had to spend part of that time in a town which offered an academic course in surgery, for the qualification demanded of a candidate-master now included a year's institutionalized study. In 1784 this period of study was doubled on the grounds that one year was insufficient to learn surgical theory. At the same time an attempt was made to solve the disturbance that the 1772 regulations had caused to the traditional pattern of training surgeons. Before the 1772 edict masters were restricted in the number of apprentices and journeymen that they could employ according to the statutes of the local community or the 1730 *règlement*.[46] The end of the apprenticeship system and the appearance of surgical *élèves* or students, however, had encouraged masters to take on a greater number of assistants (presumably at a price and in towns offering surgical courses) than they needed. The more flexible system, moreover, had supposedly allowed *gens sans qualité* (riff-raff) to pretend that they were surgical students and to practise surgery illegally 'to the detriment of the public good'. In consequence, the apprentice system, if not reimposed, was revived in 1784 under a different guise. All surgical students 'who [were] taken on by masters' had to live with them, while only masters in towns with a corps or college of surgeons could henceforth 'train [surgical] pupils'. Only professors attached to the new surgical schools and the chief surgeons in hospitals were allowed as many students as they liked.[47]

The establishment of a quasi-national system for the training and examination of physicians and surgeons clearly went a long way to standardizing entry procedures to the Ancien Régime corporative medical community. Moreover, the 1730 reorganization of the surgical corporations helped that community extend its reach beyond its traditional boundaries, by making provision for the first time for the official licensing of not just surgeons, but herniotomists, dentists, bone-setters,[48] and midwives. Henceforth none could practise one of these traditional occupations of the medical penumbra, unless they had first been

[45] Royal declaration of 12 Apr. Registered by the Paris Parlement 8 May 1772. Discussed in *Statuts et règlemens généraux*, 28–30 n., and printed in ibid., doc. xv.

[46] The latter had allowed one per master: see Ibid. 30, art. xxxiv.

[47] Isambert, xxvii. 418–20: royal declaration of 18 June 1784, registered in the Paris Parlement 20 Aug. For the new surgical schools: see below, Sect. C.

[48] For these three categories, see *Statuts et règlemens généraux*, 47, art. lxx.

examined and certificated by their local community of surgeons. In consequence midwives in particular were now, at least in theory, brought completely under the umbrella of the corporative community. In the sixteenth and seventeenth centuries midwives outside Paris and other big towns had generally undergone no formal apprenticeship or certification; most learnt their trade informally from their mothers or other practising midwives.[49] After 1730, in contrast, midwives, like surgeons, were divided into three classes: those practising in towns with a community of surgeons, those in towns without, and those in *bourgs* and villages. Midwives in all three classes had to be examined and licensed by representatives of the local community of surgeons before they could practise legally. All had to give evidence, too, that they were Catholics and of good morals, while those in the first class had also to show they were at least 20 years old and had been apprenticed for a two-year period to a local midwife or had served a two-year *stage* in the local *hôtel-dieu*.[50]

However, on the eve of the Revolution the standardization process still remained incomplete for three reasons. In the first place, no attempt was ever made to legislate in a similar manner for the pharmaceutical branch of the corporative community. Throughout the eighteenth century pharmacy remained an occupation legally restricted only in towns where there was a corporation of apothecaries, while the regulations governing entrance to the art continued to be specific to the individual corps. Admittedly, there are signs that conventionally trained but unlicensed pharmacists in non-corporate towns were finding their uncertificated position uncomfortable in the final decades of the Ancien Régime. From the 1760s, if not before, the apothecaries' corporation of Paris and other university towns were examining a number of conscience-stricken journeymen and granting them a special *maîtrise* to set up a shop in towns where there was no corporation or the corporation had become defunct. One such, for instance, was François-Germain Genest, a native of Pithiviers (a town north-east of Orléans) and the son and grandson of an apothecary, who claimed to have practised for twelve years in his home town before approaching the Paris community in 1773.[51] But the certification of small-town apothecaries never became

[49] See above, Ch. 4, Sect. E.

[50] *Statuts et règlemens généraux*, 48–51, arts. lxxi–lxviii. Three months service in the Paris Hôtel-Dieu sufficed. From 1772 it was possible to become a licensed midwife simply by serving with a midwife or a male accoucheur for two years: ibid. 48 n. The attempt to regulate entry to the practice of midwifery reflects a growing 18th-cent. concern with the obstetrical ignorance of midwives. The establishment of institutionalized training for midwives is discussed below, Sect. C, and in Ch. 12, Sect. B.

[51] BN MS Fr. 14821, fos. 27^{v}–28^{r}. See above, Sect. A, for the apothecaries' corporations which had ceased to exist in this period. Another community which awarded the *maîtrise* on request to apothecaries based in non-corporate towns was the Reims corporation: see BM Reims MS 1088, no. 8, request of François Habert, journeyman apothecary at Mézières, 1753.

a formal requirement and the impetus for the informal development remains unclear.[52] In consequence, in contrast to surgery, pharmacy retained until 1789 the hallmarks of a craft rather than a liberal profession, for candidate-masters still had to serve as apprentices and journeymen. On the eve of the Revolution it was only possible for individuals to gain exemption from serving a formal apprenticeship by applying directly to the royal council.[53] Furthermore, in contrast to surgery again, pharmaceutical training remained always concentrated in the *boutique* not the classroom. Although the quality and extent of institutionalized training in pharmacy increased dramatically over the century, as we will see, and many candidate-masters availed themselves of the new facilities, classroom instruction never became compulsory until the establishment of a nationally organized pharmaceutical profession in 1803.[54]

In the second place, the new nationwide regulations governing the training and examination of physicians and surgeons did not so much standardize entry procedures as lay down a minimum set of requirements. No one could theoretically practise medicine or surgery in France (in medicine's case urban France) without fulfilling the conditions laid down in the edicts, but a particular corporation could set a much tougher set of conditions than the edicts prescribed. Individual medical colleges were perfectly at liberty to demand more of entrants than the bare minimum demanded by law, so that the promulgation of the edict of 1707 led to no significant change in the statutes of the colleges of the big cities.[55] Indeed, as a result of the edict even the rules governing the path to a medical degree were not really harmonized, for faculties with more onerous entry requirements and a more rigorous system of examinations (specifically Paris) were permitted to continue as usual.[56] Provincial rights were also protected on occasion for physicians who practised in Artois had to have a medical

[52] The Paris community never examined more than five such supplicants p.a. One supplicant, Edmond-Claude Fremoy, who exercised pharmacy at Auxerre with a permit from the municipality or king's representative in the town, claimed that he wanted 'to procure the confidence of the public by [obtaining] a more authentic title'. See BN MS Fr. 14821, fo. 26r: Fremoy was granted the *maîtrise*, 16 Sept. 1773.

[53] e.g. the case of Charles-Alexandre Goret given permission by the crown in May 1789, after being examined and certified by the Paris community, to practise at Abbeville, although he had not served an apprenticeship: see BN MS 14821, fos. 46r–47r.

[54] *Recueil de lois et règlemens concernant l'instruction publique, depuis l'édit de Henri IV en 1598 jusqu'à ce jour* (8 vols.; Paris, 1814–28), ii. 438–50: law of 13 Aug. 1803. Even then not all pharmacists had to have attended the *écoles de pharmacie* established by this law, for the profession was divided into two groups: see below, Conclusion, Sect. D.

[55] The 1707 edict specifically permitted the monopoly rights of the existing medical colleges to exist, albeit 'by provision and until otherwise authorized by us'. The colleges were empowered to demand that candidates performed a four-hour *acte* and paid a 150 *livres* fine, but again these were only minimum requirements: see Isambert, xx. 515, art. xxxi.

[56] Ibid. xx. 512 and 517, arts. xv and xxxvii. Obviously this made sense where a doctoral degree brought the immediate right to practise in the town.

degree from Douai.[57] Admittedly, in theory, surgical communities had no such freedom, for the 1730 edict specifically forbade all but the Paris corporation, whose statutes had been reformed in 1699, from setting higher entry hurdles.[58] Nevertheless, in their case too the restriction was quickly ignored and the most prestigious corporations continued to set their own standards with royal connivance. At Montpellier from 1770, for instance, candidate masters had to be 24 years old (not 22), hold an MA, have attended institutional instruction in surgery for a year,[59] have served a four- (not three-)year *stage* with a master or in a hospital, and have undergone twenty (not nine) separate examinations over a four-week period.[60] In this way the regulations governing entry to the most prestigious medical and surgical corps in the country continued to be locally rather than centrally determined. Indeed, as was pointed out in Section A, entrance qualifications were frequently made more rigorous over the century.[61] Paradoxically, then, the introduction of standardization was accompanied by the entrenchment of local privileges and peculiarities.

In the third place, the move towards standardization had much of the legislative flourish about it. It was one thing to legislate for change in Ancien Régime France, quite another to ensure compliance. Understandably, the attempt to control significant sectors of the medical penumbra was a complete failure: unlicensed midwives remained a commonplace until the Revolution. But even the regulations governing entrance to the practice of surgery and physic seem to have been frequently ignored in some respects. Thus, a number of faculties (primarily those that offered cheap degrees to students trained elsewhere) continued to be accused of graduating medical students after only the most cursory examination. The Reims Faculty, where some fifteen minor ordinaries[62] were bestowed every year after 1750, had a particularly bad reputation: 'By putting a hundred *écus* in a basin, | You are signed on, to the right, as a child of Cujas [i.e. a lawyer] | But, if by chance, you had paid your money on the left, | You would find yourself a physician'.[63]

[57] Ibid. xx. 515, art. xxx. Paris and Montpellier graduates were allowed to practise in Artois. There is no evidence that the legislation guaranteeing the rights of other provincial faculties, such as Aix, was maintained.

[58] *Statuts et règlemens généraux*, 63; provision of the enabling 'Déclaration du roi, portant confirmation des statuts-généraux pour les chirurgiens des provinces du royaume'.

[59] i.e. two years before it became nationally obligatory.

[60] Dulieu, *Chirurgie*, 129–33. In 1772 Louis XV also gave separate statutes to the corporations of surgery in the towns of Flanders: see *Statuts et règlemens généraux*, doc. xvii.

[61] See above, p. 482.

[62] The minor ordinary gave representatives the right to practise in France but not in Reims. The annual figures for Reims graduates given in Table 8*a* are inflated by the inclusion of British and other non-native students seeking the special degree for foreigners, which brought no right to practise in France: see Table 8*b*. For the different types of Reims degree, see above, n. 8.

[63] A lampoon from the pen of the poet De Piis, cited in O. Guelliot, *La Fin de la faculté de*

Admittedly, it is difficult to know how to evaluate such gibes. A study of the *peregrinatio academica* of French medical students suggests that those who did take medical degrees in supposedly venal faculties had usually studied elsewhere for the appropriate length of time.[64] Also, the sheer number of printed dissertations which survive from Reims indicates that the Champagne Faculty did at least insist that candidates for the minor ordinary went through the motions of demonstrating their knowledge, even if little attention was paid to their intellectual calibre.[65] Moreover, it is clear from the correspondence of Guillaume-François Laënnec, himself a Montpellier graduate, that the baccalaureate and licence could only be taken at Reims at three-monthly intervals, as prescribed by law.[66] It is possible, then, that the situation was not as bleak as critics suggested. Nevertheless, there must have been a world of difference between the experience of a candidate for a Reims minor ordinary and that of a Paris or Montpellier graduand. The leading faculties of Paris and Montpellier, the top medical colleges, and the élite surgical corps definitely did ensure that candidates were properly examined, and their standards, of course, were higher anyway.[67]

If royal declarations governing the training and examination of surgeons and physicians were frequently flouted by the less prestigious corporations, this reflected in large part the absence of any effective mechanism for ensuring compliance. Ostensibly, royal control over the corporative medical community was much greater in the eighteenth than in previous centuries, but in reality the crown's reach remained limited, even supposing it had wanted to enforce its will.

In the sixteenth and seventeenth centuries the crown had left the supervision of the corporative medical community and the task of policing medical practice largely in the hands of the local corps. Although the crown's judicial

médecine de Reims (Reims, 1909), 31. Medical reformers during the Revolution were extremely caustic about standards: e.g. the general complaints in Félix Vicq d'Azyr, 'Nouveau Plan de constitution pour la médecine en France', *Histoire et Mémoires de la Société Royale de Médecine: Années 1787–1788*, 9 (1790), 3.

[64] Julia and Revel, 'Étudiants', 267–8, a study of Avignon graduates.

[65] BM Reims Printed Books CRII MM 725 (6 vols.): admittedly, the collection only begins in the 1760s.

[66] A. Rouxeau, *Un étudiant en médecine quimpérois (Guillaume-François Laënnec) aux derniers jours de l'Ancien Régime* (Nantes, 1926), 73–4. The Reims faculty may have gained its poor reputation primarily from the fact that it was empowered to award a medical degree to foreign students, virtually on request.

[67] A conclusion drawn from the surviving minute-books, personal memoirs, and the huge collections of dissertations which survive. Only one personal account has so far been uncovered of a medical graduate's experience of being examined before a medical college: see the letter of Claude-François Achard (an Avignon doctor) to his former professor Esprit Calvet (1728–1810) about his reception at Marseilles in July 1775: BM Avignon MS 2368, fos. 35–6: Achard found the experience testing.

officers did interfere in medical matters, they did so largely in an *ad hoc* and negative way, limiting their intervention to licensing individuals to break the profession's local monopoly.[68] The day-to-day administration of medicine was left to the individual corps, especially the colleges of physicians, who exercised their powers independently of each other and of any external authority. The one branch of the medical community where there was some degree of theoretical centralization was surgery, where the barber-surgeons were ultimately under the control of the king's premier barber who had the right to appoint a member of each corporation as his lieutenant. There is no evidence, however, that the king's premier barber was ever used as a conduit for closer royal supervision of surgery. The lieutenant, if appointed at all, was there to ensure that the royal barber received a percentage share of the entrance fine, nothing more.[69] There is no evidence either that the situation changed in 1668, when the king's premier surgeon, on royal orders, bought the premier barber's rights and became empowered himself to appoint lieutenants. The right of appointment remained a fiscal privilege, and was not transformed into an administrative tool.[70]

The situation, however, changed significantly (at least on paper) in 1692. In February of that year the king abolished his premier surgeon's right to install lieutenants and established a new hierarchy of royal officials, formally invested by the local authority, to represent the crown in the medical colleges and surgical corps. In the following year the office of *médecin du roi* was also created in non-collegiate towns. Only Paris was unaffected.[71] The duties of the new officials were twofold. On the one hand, they were supposed to ensure the maintenance of the statutes of the local corporation. The *chirurgien juré du roi*, for instance, had to be present whenever a *maîtrise* was bestowed, had the right to preside over the ceremony, and could receive a third of the fee.[72] On the other

[68] See above, Ch. 4, Sect. B, for many exx. of this.

[69] The relations between the king's premier barber and the Paris community of barber-surgeons are discussed above in Ch. 3, Sect. E.

[70] By the mid-18th cent. these rights were very lucrative. When a new premier surgeon was appointed, he had the right to demand a gift from every surgeon in the kingdom. In 1747 the incoming premier surgeon, Germain Pichaut de la Martinière, charged 21 sous 3 *deniers* and supposedly collected 48,000 *livres*: see François Chaussier, *Mémoire sur quelques abus dans la constitution des corps et collèges de chirurgie et particulièrement sur l'abus des droits, prérogatives et privilèges attachés à la place du premier chirurgien du roi* (Dijon, 1789), 9, 28–9.

[71] Edicts of Feb. 1692 and May 1693. Official representatives were not appointed to the pharmaceutical corps. The premier surgeon continued to be able to appoint lieutenants to the Paris community: see Jean Verdier, *La Jurisprudence particulière de la chirurgie en France, ou traité historique et juridique des établissemens, règlemens, justice, devoirs, fonctions, honneurs, droits et privilèges, des sociétés de chirurgie* (2 vols.; Paris, 1764), i. 39–42; and id., *La Jurisprudence de la médecine en France* (2 vols.; Alençon, 1762–3), ii. 177–210.

[72] It does not seem that the official had a power of veto.

hand, the officials were expected to perform particular services for the crown. Thus the *chirurgien juré* was empowered to license surgeons in the local *senéchaussé* where this right did not belong to the community, while until 1707 the *médecin du roi* in non-collegiate towns had the right to license the practice of other graduate physicians.[73] In addition, the officials were expected to use their expertise to assist the local authorities. In particular, in cases of suicide, or deaths and wounds arising from violence or an affray, the officials were required, if asked by the family, judiciary, or other authority, to carry out an autopsy or medical investigation and prepare a report for use in court in return for a fee. The *chirurgiens jurés du roi* only retained their supervisory function until 1723, from which date they were replaced again (in this sphere alone) by lieutenants of the king's premier surgeon.[74] Presumably, Mareschal and La Peyronie had persuaded the regent that the system of control would function more effectively if the local officials were their own clients rather than state bureaucrats.[75] The office and duties of the *médecin du roi*, however, remained unchanged until the Revolution.

Theoretically, then, the crown had established an agency for enforcing its wishes sometime before it moved to regulate the practice of physic and surgery. In fact, the initiative was largely vitiated because the offices quickly came to be held collectively by the local corporations. The offices created in 1692 were venal (indeed, the move was almost certainly a fiscal expedient dressed up as a policing initiative), and there appear to have been no restrictions on their purchase by colleges and communities, rather than individuals.[76] Many medical corporations, therefore, purchased the offices themselves and then nominated one or more of their members to serve as the crown's agent for a period of time. The Nîmes College of Physicians was one such institution that bought the office, and it was for this reason that it was so heavily in debt by the mid-eighteenth century.[77] The college used the post as a fiscal lifeline for needy but

[73] Thereafter under the Edict of Marly physicians had only to register their letters with the authorities: see Isambert, xx. 516, art. 35. The *médecin du roi* also seems to have represented the local physicians during the examination and admittance of new surgeons; under the 1730 regulations the physicians' limited right to be present at these proceedings was clearly defined: see below, Sect. F.

[74] Verdier, *Jurisprudence de la chirurgie*, i. 44–6: edict of Sept. 1723.

[75] When the premier surgeon's rights were re-established he could only appoint a lieutenant to a community in a town with a *sénéchaussée* court; this limitation was confirmed in 1736, although the 1730 statutes covering provincial surgery had allowed lieutenants to be introduced wherever there was a community of six surgeons: see *Statuts et règlemens généraux*, 6, 11–15, 64; Verdier, *Jurisdiction de la chirurgie*, i. 47–54. From 1730 the premier surgeon's lieutenants were also empowered to inspect surgeons' shops throughout the geographical area covered by the royal court based in the community town: see *Statuts et règlemens généraux*, 51–2.

[76] See the long list of community purchases in Verdier, *Jurisprudence de la médecine*, ii. 204–6.

[77] See above, Sect. A.

worthy candidates. Thus, in 1744 one Jean-Baptiste Mytier, son of a local master-surgeon, who had difficulty paying the 150 *livres* entry fine, agreed to fill the role of *médecin du roi* for three years and pay the college 90 *livres* per annum from the proceeds.[78]

Clearly, from their inception, it was the corporations for the most part which controlled the crown's agents and not the crown. The reintroduction of the lieutenants of the premier surgeon of the king may have done something to redress the balance in the case of the surgical communities. Arguably, it was a centralizing move to obviate the tendency towards collective ownership of the royal offices. But the lieutenants, too, may have been relatively independent of the centre, for the officials had to be chosen from a list of three names forwarded by the community (according to the 1723 edict and its subsequent confirmations), and the successful candidate expected to serve for life. The Montpellier surgeon Martin Deidier (1698–1774) was lieutenant from 1738 to 1774.[79]

Even post-holders appointed directly by the crown were as unlikely as the rest of the pervasive *officier* class to put the state's interest before their own, thanks to the inevitable role of venality and patronage in their appointment.[80] Towards the end of the Ancien Régime the city of Paris was served by perhaps a half-dozen *médecins* and *chirurgiens du roi*, attached to the Châtelet court, fulfilling for the capital the forensic duties performed elsewhere by the officials established in 1692.[81] In January 1787 a post as *conseiller médecin juré ordinaire* at the Châtelet was bestowed by the *lieutenant-civil* of Paris on one Charles-Barthélemi-Jean Le Clerc, *avocat* in the Paris Parlement and doctor-regent of the Paris Faculty. His appointment was supported in writing by all the other Parisian *médecins* and *chirurgiens du roi*, and numerous local worthies who testified to his good morals, religion, and loyalty. The testimonials, however, were for formality's sake. Le Clerc was actually taking over the post of his father Barthélemy-Toussaint Le Clerc. What is more, he was under age, and could only accede to the post because the king had been gracious enough to breach his

[78] BM Nîmes MS 414, fos. 78ᵛ–80ʳ, decision 27 May 1744. Mystier was treated very well for the proceeds from the office were normally paid to the college.

[79] Dulieu, *Chirurgie*, 96.

[80] There were about 50,000 royal officeholders in the 18th cent., most of whom had purchased their posts. Venal officeholders, especially fiscal bureaucrats, regarded their office as private property, but were expected to keep the crown afloat with short-term loans for which they were well rewarded. Consequently, they tended to frustrate all attempts at financial reform in the second half of the century. See esp. J. F. Bosher, *French Finances 1770–1795: From Business to Bureaucracy* (Cambridge, 1970); and D. Bien, 'Offices, Corps and a System of State Credit', in K. Baker (ed.), *The French Revolution and the Creation of Modern Political Culture*, i. *The Political Culture of the Ancien Régime* (Oxford, 1988).

[81] These were of long standing and may well have been the prototypes for the 1692 creations. The surgeons of the Châtelet, of course, had no power of policing surgery in the capital for this was the preserve of the premier physician's lieutenant.

own legislation by providing a dispensation. It was a typical case of Ancien Régime jobbery.[82]

Such individuals primarily wanted a medical office, so they could exploit it to their own advantage. In early June 1774 Guillaume-François Laënnec, native of Quimper, wrote to his lawyer father from England that progress in his future career was dependent on his landing a medical post in the army.[83] By early August, however, he had changed tack and was on the way back to his home town post-haste, spurred on by the news that Bulot, *médecin du roi* at Quimper, was dead. Just before Christmas 1774 Laënnec registered his doctoral letters with the clerk of the local court (in conformity with the 1707 edict) and on 5 July 1775 (presumably after lengthy negotiations) he became a *conseiller médecin ordinaire du roi*. In his father's eyes this was to be the stepping-off point for a lucrative career. It was a post that would give the young, ambitious Laënnec a high profile in the locality, and getting known was the key to a successful practice.[84]

Potentially, the introduction of royal or court-appointed officials to police and supervise the corporative medical community, even more than the promulgation of nationwide regulatory edicts, was a threat to the community's localist identity. Thanks to their venal character, however, this threat was largely contained. On the other hand, there can be no doubt that the state's growing interest *tout court* in the structure of the corporative community helped to destabilize, although never ultimately destroy, the community's hierarchical nature. In the sixteenth and seventeenth centuries the lines of command were clear: in towns where all three branches of the community were incorporated, the physicians were in control, though their paternalistic handling of their subordinates could occasionally lead to intercorporate friction. The state-induced changes of the eighteenth century fractured the traditional relationship between the physicians and surgeons by placing the surgical corporations within an alternative hierarchy formed by the premier surgeon and his lieutenants: at moments of friction between physicians and surgeons, the surgeons had a novel and powerful backer. At the same time, the changes in the way surgeons were trained by 1789, following the abolition of apprenticeships, the introduction of compulsory institutionalized education, and the demand that master-surgeons in the large towns be men of letters, eroded the traditional differences between physic and surgery. Surgeons were becoming socially more

[82] AN Y 1055, unnumbered series of letters from a collection concerning surgeons, physicians, and midwives; the collection contains testimonials for other candidates to the Parisian posts.

[83] For the expansion in the number of military medical appointments in the 18th cent., see Table 11*b*.

[84] Rouxeau, *Étudiant en médecine*, ch. 10. There was no medical corporation in Quimper; hence the office could not be held collectively.

important and trusted, as their role in the licensing of midwives demonstrated. The structural reforms of the eighteenth century, then, helped to emancipate surgery (though not pharmacy) from its traditional inferior position. This emancipation was further fostered by the surgeons' establishment over the century of high-quality surgical instruction, independent of faculty control, a development that reflected the faculties' relative failure to meet the growing eighteenth-century demand for an expanded provision of institutionalized medical training.

C. The Expansion of Medical Instruction

In the sixteenth and seventeenth centuries institutionalized medical teaching was provided by the teaching faculties, the medical professors of the Paris Collège Royal, and a handful of medical colleges, notably Lyons. The faculties bore the brunt of the teaching and primarily provided courses in the five parts of theoretical medicine: physiology, semiology, pathology, hygiene,[85] and therapeutics. Additionally, in the seventeenth century the leading faculties, the Collège Royal, the Jardin du Roi (at least from 1640), and a number of medical colleges also provided courses in the ancillary medical disciplines of anatomy, botany, surgery, and pharmacy for the benefit of both medical students and journeymen surgeons and apothecaries. The theoretical courses were given in Latin, the ancillary courses largely in French. None of the faculties offered medical students the chance to perform dissections themselves or look after patients.[86] Faculty education was chiefly aural, occasionally visual, but never practical. Medical students were expected to graduate first and then pick up practical knowledge of patient care through acting as a practising physician's assistant. In this way their learning-process was the inverse of the surgeons' or the apothecaries, who first of all gained a practical acquaintance with their *métier* through an apprenticeship and then moved on, if only in a minority of cases, to classroom studies. But the process perfectly reflected the distinction between the physicians and their subordinates; physic was a learned art, surgery and pharmacy manual.[87]

Until the end of the seventeenth century few (inside or outside the corporative community profession) questioned the nature or scope of the provision in medical teaching.[88] Thereafter, especially in the second half of the eighteenth

[85] This part was largely neglected: see above, Ch. 7, Sect. E.

[86] There were courses in patient care, but these were simply lectures on how to treat particular diseases: see above, Ch. 2, Sect. G.

[87] See above, Ch. 2, Sect. A. It was possible to gain hands-on dissecting experience at the Jardin du Roi.

[88] An exception were the surgeons of Saint-Côme, who had attempted, without success, to establish some form of institutionalized teaching in surgery, independent of the faculty: see above, Ch. 3, Sect. E.

century, criticism began to mount. In an age which placed a novel emphasis on the value of experiential learning, under the influence of Enlightenment epistemology, there was a growing insistence from both inside and outside the corporative community that physicians should be given more profound instruction in the ancillary medical sciences, above all that they should be more carefully trained and examined in practical patient care before they began their careers.[89] According to Diderot, the absence of such practical instruction was lethal: 'As a result a young doctor makes his first essays in the art on us, and only becomes skilful by dint of murder.'[90] By the 1770s and 1780s the voices within the community of physicians that called for institutionalized practical learning for medical students also demanded that the faculties provide sophisticated and compulsory institutionalized instruction for surgeons, apothecaries, and midwives, whose habitual ignorance was deemed to be harmful to the public.[91] By then such concern for the training of their subordinates was scarcely radical. In the 1770s even the state was convinced that trainee surgeons, if not apothecaries, should spend a period of time in the classroom,[92] while the most prestigious surgical corps, as we will see, had been promoting the value of high-quality surgical education for many decades, albeit under their own aegis.

The eighteenth century, therefore, saw an increasing demand that medical teaching be both extended and made much more available. Indeed, given the modish interest in botany among the élite and the novel industrial applications of chemistry (a new eighteenth-century science which remained closely attached to pharmacy), an interest in promoting instruction in the ancillary medical sciences was not limited only to those concerned with the training of the different branches of the medical profession.[93]

Since the complaints about the inadequacy of the faculty curriculum were gathering force as the Ancien Régime drew to a close and reached a crescendo in the early years of the Revolution, it is clear that the faculties failed to respond suc-

[89] This demand is encountered for the first time in Pierre Hunauld, *Projet d'un nouveau cours général de médecine* (Château-Gontier, 1718), 36–9. For Enlightenment epistemology, see above, Ch. 6, Sect. C; and for its increasing effect on medical theory, Ch. 7, Sects. B and C.

[90] 'Plan d'une université pour le gouvernement de Russie', in id., *Œuvres complètes*, ed. J. Assézat (20 vols.; Paris, 1875–7), iii. 439. A remark repeated by Vicq d'Azyr, in his 'Plan', 1.

[91] The fullest statement appears in Vicq d'Azyr, 'Plan', 59–67, 74–5, 113–19. The training of pharmacists was not usually discussed. Physicians throughout the century complained of the ignorance of surgeons, but this in part was a rhetoric reflecting the persistent argument in the period between the two branches of the corporative community over their respective roles: see below, Ch. 9, Sect. D.

[92] See above, Sect. B, for the legislation of 1772 and 1784, introducing compulsory institutionalized surgical instruction.

[93] The best intro. to the growing interest in chemistry in particular is C. G. Gillispie, *Science and Polity in France at the End of the Old Regime* (Princeton, 1980), esp. pt. 3, 'Applications'.

cessfully to the new climate.[94] Admittedly, they did broaden their curriculum to a degree. The 1707 Edict of Marly demanded that courses in anatomy, botany, and pharmacy (Galenic and chemical) should become a standard part of the curriculum and there seems little doubt that the stipulation was uniformly upheld thereafter.[95] A number of faculties also set up independent French language courses in obstetrics and chemistry. The first course in midwifery seems to have been given by the physician Jean-Jacques Fried (1689–1769) at Strasburg in 1728; others were created later at Paris in 1745 and at Reims and Montpellier in the 1780s. The first course in chemistry was established at Montpellier even before 1700, and on the eve of the Revolution there were separate chairs in addition at Paris, Caen, Toulouse, Nancy, Reims, and Perpignan.[96] The jibe of many critics in the Revolutionary decade, therefore, that the faculties offered no instruction in the ancillary medical sciences was untrue. On the other hand, the response was definitely patchy and insufficient given the burgeoning demand.

Above all, as far as the training of physicians was concerned there was next to no practical training in patient care. From the 1770s institutionalized teaching in patient care became specifically associated in France with some form of clinical instruction in a hospital.[97] In pre-Revolutionary France, however, only one clinical chair attached to a hospital was ever established in a French faculty of medicine: at Strasburg as early as 1756 under the influence of Jean-Jacques Sachs (1686–1762). Moreover, the Alsatian Faculty, it will be recalled, although well attended, was not really part of the French medical system.[98] Elsewhere, there was only a minor concession to the contemporary emphasis on experiential learning with the establishment in several faculties of specific chairs in

[94] In 1789–90 the National Assembly's Health Committee was inundated with critiques of the inadequacy of contemporary medical education and suggested solutions; Vicq d'Azyr's 'Plan' was just the most famous: see below, Conclusion, Sect. C.

[95] Isambert, xx. 513, art. 21. Courses in anatomy and botany were also established in a number of other medical colleges; e.g. Nancy: see BFMP TMP in 4°, xi, no. 156, letters patent, 1752, art. 25 (this helps to explain the transfer of the Univ. of Pont-à-Mousson to Nancy in 1768).

[96] Details in L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), 392–5.

[97] As the title of the reformers' tracts often made abundantly clear. e.g. Georges-Christophe Würtz (1756–1823), *Mémoires sur l'établissement des écoles de médecine pratique à former dans les principaux hôpitaux civils de France à l'instar de celle de Vienne* (Paris, 1784); Joseph-Michel Dulaurens, *Essai sur les établissemens nécessaires et les moins dispendieux pour rendre le service des malades dans les hôpitaux vraiment utile à l'humanité* (Paris, 1787); Nicolas Chambon de Montaux, *Moyens de rendre les hôpitaux plus utiles à la nation* (Paris, 1787). Hunauld had already called for hospital-training for physicians in 1718: see above, n. 89. Reformers, like Vicq d'Azyr, wanted hospitals to be used as schools of instruction for rural surgeons and midwives, not just physicians. For the new role of the hospital in the transmission and creation of knowledge, see below, Ch. 11, esp. Sect. A.

[98] E. Wickersheimer, 'La Clinique de l'hôpital de Strasbourg au XVIIIe siècle', *Archives Internationales de l'histoire des Sciences*, 16 (1963), 253–76. For the Germanic character of the Strasburg Faculty, see above, Ch. 7, n. 36.

practical medicine, beginning with the foundation at Montpellier in 1715. The incumbents of these chairs certainly did introduce their students to real patients, but their course was not given in a hospital. Rather, if the Montpellier foundation is any guide, the professors were supposed to run an out-patients' clinic where the class was spasmodically showed examples of diseases discussed in their lectures.[99] At Montpellier, admittedly, from 1769 some professors (distinct from those who held the chair of practical medicine) did take their students to visit the sick in the army's hospital of Saint-Louis, but this was a hospital for patients with venereal and skin diseases, so the types of disease to which students would have been consequently exposed were few.[100] By 1789, then, no French faculty, not even Paris or Montpellier, could provide the kind of clinical training established in the second half of the eighteenth century at Edinburgh, Vienna, and Pavia.[101]

The reasons for the faculties' failure to respond were several. In the first place, both the belief that the graduate physician should be practised in patient care and cognizant of the ancillary medical sciences, and the novel emphasis on providing the subordinate members of the corporative community with institutionalized teaching, were ideas only forcibly articulated in the closing decades of the Ancien Régime. Just like the new concept of the good physician, discussed in Chapter 7, they were ideas associated with a radical élite within the community of physicians and not necessarily shared by the majority. As a result, given the democratic structure of corporate bodies, forces in favour of the status quo would have been difficult to counter quickly. To the extent, however, that student dissertations after 1760 suggest that the importance of experiential learning was a medical commonplace in the decades before the Revolution,[102] it would be unwise to put down the faculties' limp response simply to conservative inertia.

A more important reason lay in their lack of resources. The faculties were not rich. Their professorships were sometimes supported by a crown endowment or

[99] L. Dulieu, *La Médecine à Montpellier*, iii. *L'Époque classique* (2 pts. in 2 vols.; Avignon, 1983–6), 1. 15–27, 549–54. For other chairs of practical medicine, see Barbot, *Chroniques*, i. 265–70; AD Calvados 1D 996, lists of professors at Caen in the 1780s revealed in the surviving theses abstracts.

[100] C. Jones, 'Montpellier Medical Students and the Medicalization of Eighteenth-Century France', in R. Porter and A. Wear (eds.), *Problems and Methods in the History of Medicine* (London, 1987), esp. 70.

[101] The best study of clinical training in an 18th-cent. medical faculty is G. Risse, *Hospital Life in Enlightenment Scotland: Care and Teaching at the Royal Infirmary of Edinburgh* (Cambridge, 1986), ch. 5. Also for Pavia, see S. Emch-Deriaz, *Tissot: Physician of the Enlightenment* (New York, 1992), ch. 8. For a general survey, see O. Keel, 'The Politics of Health and the Institutionalization of Clinical Practice in Europe in the Second Half of the Eighteenth Century', in W. F. Bynum and R. S. Porter (eds.), *William Hunter and the Eighteenth-Century Medical World* (Cambridge, 1985).

[102] See above, Ch. 7, Sect. C.

the occasional legacy, often bestowed a century or more before, but their only common source of income was derived from fees paid by candidates for degrees. As it was customary to divide all or the larger part of the fees between the professors as a supplementary salary, the faculties had virtually no funds to create new lectureships.[103] Frequently, even to conform with the requirements of the 1707 Edict of Marly professors had to double up. Only Paris and Montpellier were well provided with chairs (eventually eight apiece).[104] Moreover, even when new chairs were established the incumbent was not always paid. Robert-Toussaint Deschamps (1750–1815), the first holder of the Caen chair of chemistry, was threatening to abandon his post in 1774 because he had not been paid for ten years.[105]

The faculties' problem was compounded by dilapidated facilities, for most owned little more than one or two *salles*, reasonably satisfactory as a site for formal lectures and debates, but impractical for teaching the ancillary medical sciences now in vogue or providing hands-on experience. Even well-frequented faculties did not always have a sturdy, purpose-built anatomy theatre before the second half of the eighteenth century. Paris only had a stone amphitheatre from 1749, while the Toulouse Faculty had to await a municipal benefaction in 1770; prior to this anatomies had taken place in the residential Collège de Périgord.[106] Moreover, cadavers were still not always easy to obtain. Though the provision of the corpses of felons or hospital inmates was usually guaranteed by local regulations, these rarely kept pace with rising demand. Even at Montpellier courses had to be sometimes suspended for lack of subjects.[107] Botanical gardens were another luxury. The Montpellier garden dated from 1593, but Caen only acquired one in 1718 and at least until 1765 it was maintained largely at the professor of botany's own expense.[108] Toulouse and Paris, on the other hand, never

[103] Only the financial position of the Paris Faculty in the 18th cent. is known in detail through the annual accounts presented in the surviving minute-book: see BFMP MS 12–16. The last vol. has been published as *Commentaires de la faculté de médecine de Paris* (*1777 à 1786*), ed. G. Steinheil (2 vols.; Paris, 1903).

[104] A useful source for the number of chairs in the different faculties in 1789 is Marie-Marc-Antoine Baras, 'L'État actuel des établissemens destinés en Europe à l'instruction publique et au progrès des connaissances humaines', in id., *De l'éducation publique dans la France libre* (2 vols.; Paris, 1793), *sub* 'départment'.

[105] AN M 196, no. 71/6, letter 23 Nov. 1774. Professors in long-established chairs often complained about the low level of their salaries; it was for this reason that Montpellier professors justified abandoning their chairs to stand-ins and concentrating on private practice (AD Hérault C524, 530: undated 18th-cent. memoranda).

[106] Barbot, *Chroniques*, i. 208, 275–82; Jacques-Albert Hazon, *Éloge historique de la faculté de médecine* [*de Paris*] *16 octobre 1770* (Paris, 1773), 63–4.

[107] Jean-Antoine-Claude Chaptal, *Mes Souvenirs*, ed. A. Chaptal (Paris, 1893), 16–17. See also AD Hérault C524 (1734), G1327 (1769), G1310 (1778).

[108] A. Germain, *L'École de médecine de Montpellier: Ses origines, sa constitution, son enseignement* (Montpellier, 1880), 76–8; AD Calvados 1D 963, no. 1 (general account of the Caen garden); AN M 196, no. 69: letter of 16 Mar. 1765 by the professor Charles-Nicolas Desmoueux (1728–1801).

had a garden at all, although Paris students were obviously free to attend the Jardin du Roi. In many provincial faculties, if professors of botany wanted to show their pupils living plants, then they had no recourse but to organize periodic *herborisations*.[109]

Obviously, in these straitened circumstances the relatively moribund state of the eighteenth-century medical curriculum is quite understandable. A change to a more extensive teaching of practical subjects could only have been possible with outside help and a large injection of cash. Neither occurred. In fact, the hospitals, identified by critics as the ideal location for teaching patient care, were usually downright obstructive in the face of reform initiatives. Hospital authorities were reluctant to allow students on the wards and objected to the choice of hospital doctors being outside their control, as would be the case with a faculty nominee. The authorities were equally hostile to handing over the bodies of their inmates to be dissected in the name of science.[110]

The consequence of the faculties' inability to respond to the new climate was inevitable: other interested parties and enterprising individuals stepped in to fill the gap, and the faculties comprehensively lost their teaching monopoly to a bevy of public and private competitors.

In the course of the eighteenth century all manner of institutions began to provide lectures in the ancillary medical sciences: municipalities, the new provincial *académies*,[111] provincial estates, communities of surgeons and apothecaries, and military[112] and civil hospitals.[113] To the list, too, must be added the Paris Lycée de Monsieur, a sort of intellectual club with an open membership founded in 1781, which *inter alia* provided instruction in medicine for its subscribers.[114] Interested parties would establish lecturers wherever they felt there was a need. Chaptal, for instance, began lecturing on chemistry in the late 1770s under the auspices of the Montpellier Academy of Sciences. The Estates of

[109] Walks in the countryside, it must be said, were organized by all professors, even where botanical gardens existed. See below, 514.

[110] e.g. C. Jones, *Charity and 'Bienfaisance': The Treatment of the Poor in the Montpellier Region, 1740–1815* (Cambridge, 1982), 124–8; Dulieu, *La Médecine à Montpellier*, iii/2. 746 and 774: on the difficulties of establishing a clinical course at the Hôtel-Dieu Saint-Eloi. See also below, Ch. 11, Sect. D, for the problem generally.

[111] D. Roche, *Le Siècle des lumières en province: Académies et académiciens provinciaux, 1680–1789* (2 vols.; Paris, 1978), i. 128–31. The foundation, role, and membership (often medical) of the provincial academies is discussed above, Ch. 6, Sect. D.

[112] For the military hospitals and their educational role, see below, Ch. 11, Sect. C.

[113] e.g. in Sept. 1724 the crown ordered anatomies to be performed for the benefit of tiro surgeons at the Paris hospital of the Charité by the chief surgeon: see François Quesnay, *Recherches critiques et historiques sur l'origine, sur les divers états et sur le progrès de la chirurgie en France* (Paris, 1744), 516 (citing the royal letters patent).

[114] See esp. C. Job, 'De l'établissement connu sous le nom de Lycée et d'Athéné', *Revue internationale de l'enseignement*, 18 (1889), 4–38.

Languedoc were so impressed that they persuaded him after a few years to give a similar course at Toulouse.[115] Lecturers, then, were often peripatetic, no more so than those giving instruction in midwifery.

In the sixteenth and seventeenth centuries midwives had had no formal instruction. Indeed, as we saw, before 1730 this branch of the medical community was virtually unorganized.[116] From the mid-eighteenth century, however, doubtless in response to contemporary fears about depopulation, the central government, local estates, and municipalities made a valiant effort to provide obstetrical training for existing and future midwives for the first time. In the big cities permanent public courses were established, such as that given at the end of the Ancien Régime by the surgeon Pierre Robin (1725–1804) at Reims.[117] In the smaller towns and *bourgs* instruction was given by itinerant lecturers who toured a particular region. Typical was the Breton surgeon Dubois, who was nominated by the Breton estates *démonstrateur d'accouchements* in 1769. Beginning his pedagogical task in the diocese of Quimper by 1789 he had also visited the dioceses of Saint-Malo, Vannes, Saint-Brieuc, Dol, and Tréguier.[118] Most of the lecturers in obstetrics were inevitably surgeons but physicians were occasionally appointed,[119] and the leading light in the campaign to educate the country's midwives was a woman, the Paris accoucheuse Angélique-Marguérite Le Boursier du Coudray.[120]

Most of the courses in the ancillary medical sciences established by provincial academies, estates, or local government were ephemeral or only set up right at the end of the Ancien Régime. To the extent, too, that they were frequently established in non-university towns they could be said to supplement rather than compete with faculty instruction. Neither point was true, however, of the courses instituted by the élite communities of surgeons. Theoretically, according to the 1699 Paris corporation's statutes and the 1730 general *règlement* for provincial corps, surgical communities were only ever permitted to give annual lessons on anatomy, osteology, and surgical operations.[121] In fact, by the eve of

[115] Chaptal, *Mes Souvenirs*, 25–33. Montpellier's academy (founded in 1706) was the only provincial academy dedicated purely to the natural sciences.

[116] See above, Sect. B, for the reform of 1730.

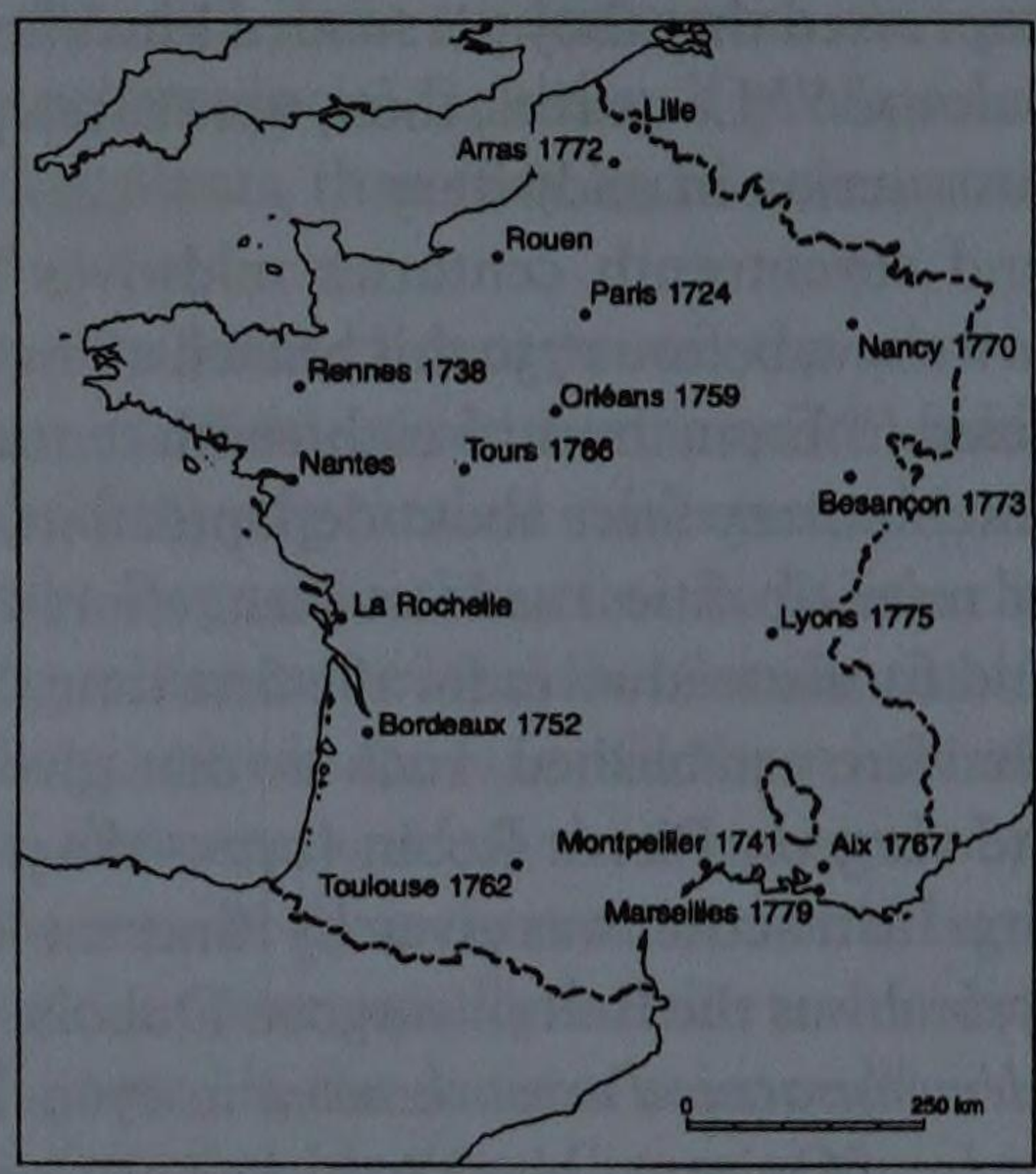
[117] Robin began this course in 1788: see his account book *sub* Mar. 1789, when he was paid 102 *livres*: BM Reims MS 1082. For fears of depopulation, see below, Ch. 12, Sect. B.

[118] J.-P. Goubert, *Malades et médecins en Bretagne 1770–1790* (Rennes, 1974), 164–6: Goubert gives several exx.

[119] e.g. the physician Paris, appointed professor royal in obstetrics at Arles in 1784: he was a member of the Montpellier Academy of Sciences and of the Royal Society of Medicine: see BFMM AFMM E 72: letter 7 Sept. 1784 (unclassified collection of letters from the 1780s).

[120] Her activities are discussed below, Ch. 12, Sect. B. The best account of the spread of midwifery courses in France and elsewhere is J. Gélis, *La Sage-Femme ou le médecin? Une nouvelle conception de la vie* (Paris, 1988), pt. iii.

[121] *Statuts et règlemens généraux*, 24, art. xxv. At the beginning of the 17th cent. the Paris Faculty had objected to the surgeons of Saint-Côme providing any instruction except in practical dissection: see above, Ch. 3, Sect. E.



MAP 8*b*. The *écoles de chirurgie* in France on the eve of the Revolution

Note: The map gives the date of foundation when this is known.

Source: M.-M.-A. Baras, 'L'État actuel des établissements destinés en Europe à l'instruction publique et au progrès des connaissances humaines', in id., *De l'éducation publique dans la France libre* (2 vols., Toulouse, 1793), ii.

the Revolution the élite communities had founded seventeen independent *écoles de chirurgie* (eight in faculty towns), giving permanent and sophisticated instruction in both the theory and practice of surgical medicine (see Map 8*b*). Their existence was both a slur on the quality of the vernacular courses of surgery that many faculties had provided for over a century and a direct challenge to the faculties' right to monopolize the teaching of the art.[122]

The first *école* to be established, and by far the most important, was at Paris, where crown-financed demonstrators in surgery attached to the community of Saint-Côme were first appointed in 1725 thanks to the influence at court of La Peyronie and Mareschal.[123] Initially there were only five lecturers (in surgical principles, osteology and bone diseases, anatomy, surgical diseases and operations, and surgical therapy), but the number was gradually increased to nine with the addition of chairs in the areas of obstetrics (1747), ophthalmology (1765), chemistry (1774), and botany (1783). Initially, too, the demonstrators, soon legally called professors, gave a series of discrete courses: there was no sur-

[122] For the Paris Faculty's understandable attempt to thwart the development, see below, Ch. 9, Sect. D.

[123] The royal letters patent permitting their institution were published in Sept. 1724: printed in Quesnay, *Recherches*, 514–19.

gical curriculum as such. From 1750, however, when the community was permitted by the crown to call itself a college, a system of student registration was introduced and a three-year cycle of lectures was established which students who intended in future to become Paris masters were obliged to follow.[124] In 1784, in a period when formal instruction was now compulsory for all students, the college curriculum was further refined. Students wishing to receive an *attestation* of attendance at the Paris *École* (i.e. those who intended to supplicate for admission to a surgical community) had henceforth to have completed the three-year course, which was specifically described as being divided in the manner of the faculty curriculum into physiology, pathology, and therapeutics. Each year students had to follow a course in anatomy, surgical operations, and obstetrics, and at some time during the three years to have studied botany, ophthalmology, and chemistry. No one could matriculate without showing his baptismal certificate (continued evidence of confessionalism), and no one could progress from one year to the next without evidence of having finished the previous stage.[125]

The Paris École de Chirurgie became a formidable teaching institution, completely eclipsing the faculty as a purveyor of surgical instruction. Its professors included most of the leading surgeons in the capital (and the country), like Jacques Tenon (1724–1816), famous for his indictment of conditions at the Hôtel-Dieu, who taught pathology from 1757 to 1794.[126] In the third quarter of the century the École had 700 to 900 students registered on its books, at a time when the Faculty had only a hundred. Significantly, it was able to attract many foreigners, especially visitors to the capital from the British Isles.[127] Its sister institutions in the province were on a much smaller scale. They usually had only four or five professors, except the *écoles* at Montpellier and Toulouse which both eventually had six, while sometimes no more than a handful of students attended the lectures. The Toulouse École eventually registered 150 students per annum, but at Rennes attendance seldom reached twenty. This might suggest that the quality of instruction in most provincial schools was low, and that tiro surgeons seeking formal training tended to gravitate towards Paris.[128]

[124] For a general account of the development of the Paris college, see Gelfand, *Professionalizing Modern Medicine*, esp. chs. 4 and 5.

[125] The 1784 *règlement* is published in Isambert, xxiii. 420: letters patent, 18 June 1784.

[126] For Tenon and hospital reform, see below, Ch. 11, Sect. E.

[127] The matriculation registers survive: see BFMP MS 54–61. The register for the course of anatomy given by Raphaël-Bienvenu Sabatier (1732–1811) from 1764 to 1771 reveals the names of 4 to 5 students from the British Isles p.a. For faculty numbers at this date, see BFMP MS 2005, matriculation register 1753–74, the only one to survive.

[128] There is no detailed survey of the provincial colleges: see Dulieu, *Chirurgie*, 110–23 (suggests 100 students p.a. at Montpellier, but there are no matriculation registers); Barbot, *Chroniques*, i. 360–406 (the professors at Toulouse had no stipend; the matriculation register exists); F. Lebrun,

Part of the attraction of the capital's surgical school lay in its purpose-built facilities. The Paris surgeons already had an amphitheatre from the 1690s and the community had a large-enough building to house its lecturers from the beginning. Even in the first decades of its history, the college was always better off than the Paris Faculty with its run-down buildings on the Rue de la Bûcherie and its wooden amphitheatre dating from the early seventeenth century. From the 1750s, however, the college also boasted a separate dissection school where students could gain hands-on experience in anatomy and surgical operations, while from 1774 it possessed its own hospice where tiro surgeons could follow the treatment of interesting surgical cases.[129] The foundation of the hospice, moreover, coincided with the college's installation in a completely new building, a neo-classical masterpiece designed by Goudoin and from 1795 the site of the modern faculty of medicine. Once more the Paris surgeons had the crown to thank for their good fortune. In 1769 Louis XV had allowed the college to acquire the University's residential Collège de Bourgogne and provided funds for its refurbishment. His successor was just as enthusiastic in his support, laying the foundation stone of the new school in 1774 and declaring a few months later that the edifice was destined to become 'the premier monument to and a permanent witness of the commitment that we have, and that we will always renew with satisfaction, to cooperate in all that depends on us for the relief of humanity'.[130] No other *école de chirurgie* could boast such royal patronage. The Montpellier professors were initially supported by an endowment left by the king's premier surgeon La Peyronie.[131] Although he left 120,000 *livres* to build a proper amphitheatre, it was not completed until 1757. Until then the professors lectured in their own homes.

For some reason the surgeons' move to set up educational institutions of their own in defiance of the monopoly of the faculty and colleges of medicine was not successfully imitated by any community of apothecaries until 1777 when the king issued a declaration governing the regulation of pharmacy and the spice trade in the capital. The April declaration was an important landmark in the history of the Paris community, for it brought together under one institution, now called the Collège de Pharmacie, all those with the legal right to practise the art in the capital, both the Paris masters and others (court apothe-

Les Hommes et la mort à Angers aux XVIIe et XVIIIe siècles: Essai de démographie et de psychologie historiques (Paris, 1971), 205–8 (suggests 20–5 students p.a.); Goubert, *Malades*, 132–4 (for Rennes); G. Pery, *Histoire de la faculté de médecine de Bordeaux et de l'enseignement médical dans cette ville 1441–1888* (Bordeaux, 1888), 180–206 (the professors were not paid). Both at Paris and Montpellier each professor was provided with an assistant who could act as a stand-in if necessary.

[129] Gelfand, *Professionalizing Modern Medicine*, esp. 90–2.

[130] Isambert, xxiii. 101–4: from a royal edict establishing the college hospice.

[131] Dulieu, *Chirurgie*, 121–7. La Peyronie also endowed one of the Paris chairs.

caries especially) who had been given royal warranty to breach the community's monopoly. More importantly in the present context, the declaration permitted the new college to establish public courses in the community's laboratory and garden in the Rue de l'Arbalète, although there was still no formal requirement that aspirant Paris masters should attend.[132] The opening academic exercises were performed on 16 July 1777 in the presence of the Paris *lieutenant-général de police* and the *avocat-général* of the Parlement. Following a decision of March 1779 it was established that the college would teach chemistry, botany, and natural history and be open to masters as well as their *élèves* (a term now also used for pharmaceutical apprentices).[133] The foundation of public teaching in the Paris college, however, was not the signal for communities of apothecaries in the other big cities to follow suit, although it is clear that the Montpellier pharmacists were contemplating a similar move on the eve of the Revolution.[134] Arguably, the apothecaries' general unwillingness to challenge the physicians' teaching monopoly reflects the fact that its corporative strength was contracting in the eighteenth century, a point alluded to earlier.[135] On the other hand, individual apothecaries were certainly not slow to offer private instruction.

The existence of private medical teaching in the leading faculty towns—Paris, and, to a lesser degree, Montpellier and Strasburg[136]—can be traced to the turn of the eighteenth century. Its early establishment and proliferation was a reflection of the unease felt by many members of the corporative community, especially the leading surgeons, about the condition of official faculty instruction long before the extent and quality of teaching in the ancillary medical sciences became a widespread concern. In the first decades of the eighteenth century it was a medical commonplace that the best tuition in surgery in Europe was to be found in the private courses given in Paris by masters of the art, such as Henri-François Ledran (1685–1770). In consequence, the decade that witnessed the establishment of the Paris École de Chirurgie also found a host of foreign medical students in the capital, like the Swiss Johann Gessner (1709–90),

[132] Isambert, xxiv. 289–91: royal declaration 25 Apr. 1777; registered in the Paris Parlement 13 May. The new regulations followed on Turgot's attempt to abolish the guild system in 1776. The Paris apothecaries had had a small simples' garden from the late 16th cent.

[133] Gillispie, *Science and Polity*, 207–12; C. Bedel, 'L'Enseignement des sciences pharmaceutiques', in R. Taton (ed.), *L'Enseignement et diffusion des sciences au XVIIIe siècle* (Paris, 1964).

[134] A. Germain, 'L'Apothicairerie à Montpellier sous l'Ancien Régime', *Mémoires de la Société archéologique de Montpellier*, 8 (1882), 117–18: from a report to the National Assembly's Health Committee, Dec. 1790. The Montpellier apothecaries wanted to introduce a year's compulsory formal instruction for *élèves*.

[135] See above, Sect. A.

[136] For private teaching at Strasburg in the 18th cent., see R. Steegmann, 'Le Milieu médical à Strasbourg au XVIIIe siècle', Mémoire de maîtrise, Univ. of Strasburg-II, 1977, 180 ff.

anxious to learn the latest surgical techniques from the Continent's most innovative masters.[137] It might have been thought that the foundation of an ever-growing number of public courses in the ancillary medical sciences would have put a rapid end to the proliferation of private teaching. But this was far from the case. The new public courses suffered from the same limitation as faculty instruction in practical medicine: they offered virtually no opportunity for hands-on experience. This was even true of the courses offered by the Paris École de Chirurgie, despite its good facilities. Even after the foundation of its dissection school, the École provided few students with the opportunity to perform a dissection or a surgical operation themselves, for from 1760 admission to the three-monthly course was limited to some twenty students nominated by the professors.[138] Private tuition, in contrast, brought not only the luxury of small-group teaching but the chance to perform dissections, surgical operations, and deliveries oneself.[139] Private teachers of surgery and anatomy sometimes had their own amphitheatres. More often than not they were surgeons at a Paris hospital (Ledran held a post at the Charité) and could use (or abuse) their position to run a private academy.[140] For students captivated by the eighteenth-century shibboleth of experiential learning there was thus no alternative to private tuition.

Indeed, as the century wore on demand only grew, as French medical and pharmaceutical students, not just go-ahead *élèves de chirurgie*, came to feel the need for hands-on experience in the practical medical sciences. By the reign of Louis XVI the number of private courses was legion, not just in anatomy, surgery, and midwifery but also chemistry, botany, and pharmacy. Many were advertised in the press, so a useful starting-point for mapping the provision in the capital on the eve of the Revolution is the daily *Journal de Paris*. A typical puff was the one that appeared in the issue for 26 June 1777 announcing the imminent commencement of a course in midwifery given by the Paris master-surgeon Théodore-Étienne Lauverjat (d. 1800), formerly chief surgeon of the

[137] See *Johannes Gessners Pariser Tagebuch 1727*, ed. U. Boschung (Berne, 1985). Aspirant physicians who wanted to study anatomy and surgery would move to Paris after listening to Boerhaave at Leiden. They were also attracted by the quality teaching at the Jardin du Roi. Among famous European visitors was another Swiss, Albrecht von Haller.

[138] M.-J. Imbault-Huart, *L'École pratique de dissection de Paris ou l'influence du concept de médecine pratique et de médecine d'observation dans l'enseignement médico-chirurgical au XVIIIe siècle et au début du XIXe siècle* (Lille, 1975), 39–56: the Paris École pratique de dissection was refounded on a much more grandiose scale in 1797. An *école pratique* was also founded at Montpellier in 1783 for 12 pupils thanks to a benefaction of 30,000 *livres* by the surgeon François Houstet (1690–1782), who had been involved with the Paris school: see Dulieu, *Chirurgie*, 114–16.

[139] To the extent that the courses in most provincial *écoles de chirurgie* were poorly attended, there may have been more chance of student participation: at Rennes, e.g. one of the professors, Rapatel, seems to have let his students operate: see Goubert, *Malades*, 134.

[140] Gelfand, *Professionalizing Modern Medicine*, ch. 6: the spelling is sometimes Le Dran.

Limoges regiment. Students who wished to attend were asked to register at his house in the Rue de Beaubourg. To encourage attendance he held out the prospect of live subjects: 'In order to support unimpeachably the discoveries that he has made relative to different aspects of the art of midwifery and to contribute thereby to the instruction of students, he announces that he will receive pregnant women and attendants of women in labour in his *hospice*.'[141]

Many of these courses were as ephemeral as their public counterparts, but some professors gained an international reputation and presumably made a good living. Thus, in the third quarter of the century no medical student (from France or abroad) could come to the capital without attending the chemistry course of the apothecary Guillaume-François Rouelle (1703–70),[142] or listening to the lectures of the Paris Faculty doctor Antoine Petit on anatomy, surgery, and obstetrics. Petit is a particularly interesting figure in that he gave private courses in his personal amphitheatre, Rue Gît-le-Cœur[143] for some twenty years and taught most of the leading physicians in France on the eve of the Revolution, such as Esprit Calvet of Avignon.[144] More intriguingly, his courses were valued for their intellectual content alone, for he does not seem to have offered hands-on experience at all.[145] Nothing could indicate better the parlous condition into which faculty education in the practical medical sciences had fallen. In this case it was not just the lack of facilities, and indeed the Paris Faculty had better facilities than most. It was rather a reflection of the peculiar manner in which Paris Faculty professors were appointed. The Paris Faculty still elected its professors from the whole body of the doctors-regent (i.e. the complete corporation) and appointed professors for only two years. This was an understandable ploy, given the fact that the Faculty had no real endowment for its chairs, but it was hardly conducive to dynamic or committed teaching. Petit himself must have realized this because among his many medical benefactions was the endowment of a permanent Faculty chair in anatomy.

Private tuition was also the only sure way in the eighteenth century for student surgeons and physicians to gain any genuine clinical instruction when the hospitals were reluctant to open their doors to the professors of the faculties or

[141] *Journal de Paris*, 177 (1777): each copy consisted of a folded folio.

[142] He also taught at the Jardin du Roi until he retired in 1768. Bordeu and Venel attended his private course in the late 1740s: see Bordeu, *Correspondance*, i. 146.

[143] A number of *annonces* of his course survive in BFMP TMP in 4°, xi, nos. 122–4. He also gave courses for midwives only (see ibid., fo. 114).

[144] Calvet studied with Petit in the early 1750s and probably corresponded with him until he died: their close relationship when he was his student is revealed in a letter written by Calvet to Petit dated 16 Mar. 1785: see BM Avignon MS 2349, fos. 113–23.

[145] Rouxeau, *Étudiant en médecine*, 38 and 51. Guillaume-François Laënnec studied anatomy and midwifery with Petit in 1769–70. A number of transcriptions of Petit's courses survive: see above, Ch. 7 n. 139.

écoles de chirurgie.[146] A number of surgeons always had the opportunity to study patient care in a hospital context through the custom of employing *élèves* as assistants to the official surgeon(s). This was a possibility that steadily grew in the eighteenth century thanks to the expansion in hospital medical personnel,[147] and the practice was officially encouraged through the 1730 *règlement* and its later refinements, which gave hospital *élèves* a speedier access to the mastership.[148] It was formalized, too, in the *gagnant-maîtrise* system, a form of hospital internship whereby trainees served in a town's hospital for six years, then were received as masters in the local corporation without further examination or fee. However, only a minority could benefit from the custom and the competition increased as a period of hospital instruction became a *desideratum*.[149] Moreover, the system excluded completely medical students. The only way most trainee surgeons and physicians had of gaining hospital experience was to pay to follow the surgeon or physician on his rounds. The experience, admittedly, was not always highly satisfactory. Guillaume-François Laënnec followed the visits of the two physicians at the Charité, Pierre-Louis-Marie Maloët (1730–1810) and François Thierry de Bussy (b. 1719), early in 1770, but he profited little as the doctors said nothing to the students during the round. For this reason, when he moved to Montpellier he was anxious to obtain more informative bedside instruction by enrolling in a course at the princely sum of 24 *livres* per month.[150] By the 1780s, on the other hand, hospital surgeons and physicians were beginning to take their educational role more seriously. In the hands of the surgeon at the Paris Hôtel-Dieu, Pierre-Joseph Desault (1744–95), and physicians such as Louis Desbois de Rochefort (1750–86) and Jean-Nicolas Corvisart des Marets (1755–1821) at the Charité and Chambon de Montaux at the Salpêtrière, private tuition in patient care, which had been little more than walking the wards, was turned into courses in clinical medicine.[151] In a memorandum written long after the Revolution Chambon de Montaux has left a particularly graphic account of his approach:

> Although my duties were totally limited to looking after the sick, I would eagerly seize any opportunity to help the studies of young men who showed the smallest desire to get to grips with the difficulties of their calling. I used to designate one or two patients each to a group of three or four young men; I took care first of all to choose diseases which are

[146] The only institutionalized clinical instruction in Paris was provided at the École de Chirurgie's hospice of six beds founded for the study of abnormal surgical cases by the crown in Dec. 1774, referred to above, p. 508. But only selected students were admitted, especially when Tenon was chief surgeon there from 1780: see Gelfand, *Professionalizing Modern Medicine*, 92.

[147] See below, Table 11*b*. [148] See above, esp. n. 39.

[149] For the growth and formalization of this system, see below, Ch. 11, Sect. D.

[150] This may not have been in a hospital: see Rouxeau, *Étudiant en médecine*, 40, 84.

[151] See above all Gelfand, *Professionalizing Modern Medicine*, ch. 7.

the easiest to distinguish, and the simplest in their course. The young men would interrogate the patients, render an account of their present condition and its indications, and propose treatment; I would rectify the suggested therapy [*la marche curatoire*], in making the [students] understand how it might be defective, insufficient, too active, etc.; then I would press them for their reasons for their preference for such treatment, or other medicaments.[152]

Ultimately, the consequence of the faculties' inability to move with the times was that their instruction became of marginal interest even for medical students. Throughout the century trainee physicians dutifully attended the lectures in theoretical medicine and probably even found them inspiring when the professor had a novel point of view and was a good lecturer.[153] But frequently they must have attended merely to satisfy the graduation requirements. At the very least a large part of their educational experience took place outside the faculty schools. Witness the case of the Montpellier graduate and later corresponding member of the Royal Society of Medicine, Pierre-Joseph Amoreux (1741–1824).[154] Amoreux was born in 1741, the son of Guillaume (1714–90), a physician at Beaucaire in Languedoc. Having studied his humanities and philosophy at a local doctrinaire college and already gained some experience in dissection, his father sent him to Montpellier. While there he followed all the Faculty courses but (albeit in retrospect) he was highly critical: the chemist Venel, who was required to teach *matière médicale* not his own specialism, was ignorant;[155] the chemistry course of Antoine Fizes (1690–1768) was poor; and Jean-François Imbert (1722–85) gave exactly the same physiology course as he himself had been taught. Even Barthez, a new recruit to the Faculty, whom other students seem to have appreciated, had his limitations. The great vitalist was keen to show off his erudition, but he 'did not know how to pitch his ideas at the students' level; first of all he had a small following; only later was he admired'.[156] What Amoreux remembered with affection about his student days was not the Faculty lectures but the extracurricular tuition.

Initially he attended the private anatomy lessons of two surgeons, Joseph Sarrau (1727–83) and Jean-Baptiste Laborie (1730–96): 'With them we saw more and more [anatomical] objects; we touched them; we freely questioned the

[152] BFMP MS 5143, memo. entitled: 'Remarques sur le mode de l'enseignement de la médecine clinique', fo. 8v (from Chambon de Montaux's papers).

[153] Montpellier vitalists must have seemed particularly exciting to students in the third quarter of the century: for faculty vitalism, see above, Ch. 7, Sects. B and C.

[154] BM Avignon MS 1269, Amoreux, 'Mes souvenirs', 4–42. The autobiography remains unedited.

[155] The custom at Montpellier of not letting professors teach their expertise also annoyed Chaptal in 1774: see *Mes Souvenirs*, 15–16.

[156] BM Avignon MS 1269, p. 28. Guillaume-François Laënnec approved of Barthez's teaching: see Rouxeau, *Étudiant en médecine*, 84.

demonstrator.'[157] Leaving this course, he moved on to another private anatomy class given by a Montpellier physician called Avézard, where he helped to prepare anatomical specimens and performed several dissections with another pupil: 'Thereby, we went through every part of anatomy, scalpel in hand, and we were soon convinced that through dissection you learn anatomy more accurately than by being a simple listener or spectator in an amphitheatre.'[158] Amoreux also had time to study other ancillary medical sciences. While at Montpellier he lodged with the physician Pierre Cusson (1722–83), one of the city's leading private medical teachers, who acted as his tutor and introduced him to Linnaean botany. This proved the beginning of a lifetime's enthusiasm and Amoreux spent many hours on trips to the countryside with another Montpellier physician, the botanist and future professor Antoine Gouan (1733–1801).[159] Finally, he attended a private course in chemistry given by Venel in the amphitheatre of the pharmacist Jacques Montet (1722–82).

During his three years at Montpellier, furthermore, Amoreux was gaining experience in patient care. During his second year he accompanied the physician Pierre Fournier (1703–66), on his visits to the Hôtel-Dieu Saint-Eloi, then spent a further two years after graduation attending the same institution, while also following the physician Jacques Farjon (1719–1803) on his rounds as a charity doctor, and assisting his own father who had moved to Montpellier from Beaucaire.[160] Even then his interest in extracurricular tuition was not exhausted. After two years in the field, he journeyed to the capital (as did many other provincial students), where he indulged in his passion for *herborisation* with Bernard de Jussieu (1699–1777), professor at the Jardin du Roi, and attended courses in anatomy, obstetrics, and *maladies* in the amphitheatre of Antoine Petit.[161] Amoreux was not a typical student in that through his father he had an easy entry into the Montpellier medical world. Nevertheless, he was a typical representative of the medical generation that came to prominence after 1760. To such children of the Enlightenment the education given by the faculty professors in their official capacity was of limited worth. What continued to make Montpellier and Paris medical Meccas was the richness and range of the extracurricular courses that the professors and the cities' wider medical community provided.

In an important respect, then, the faculties had been marginalized as teaching institutions by 1789. They still dominated the creation and dissemination of

[157] BM Avignon, MS 1269, p. 24. [158] Ibid. 25–6.

[159] Neither Cusson nor Gouan were ever permanent faculty professors during the Ancien Régime, although both acted on occasion as substitutes.

[160] BM Avignon MS 1269, pp. 32–4. Farjon was employed by the Miséricorde, an institution which organized out-relief for the poor and sick.

[161] Ibid. 35–41. Bernard de Jussieu belonged to a family of exceptional 18th-cent. botanists.

medical theory and controlled the graduation of medical students. But they failed to provide the tuition in the various aspects of practical medicine that an increasing number of young physicians, surgeons, and apothecaries demanded. This is not to say, of course, as many historians have done, that the faculties were out of touch with the experientialist spirit of the age. After all, through their theoretical teaching, they helped to promote and popularize it.[162] Moreover, to the extent that a number of professors and graduate physicians strove to fill the gap in tuition through their private efforts, it is evident that some faculty members perceived the new needs of their students and responded to them, and others doubtless blessed their efforts.

None the less, it is impossible to deny that on the eve of the Revolution the faculties were no longer in the authoritative position they had occupied in the sixteenth and seventeenth centuries. Before 1700 the hierarchical organization of the corporative medical community was mirrored and justified by the monopolistic role of the faculties in articulating medical ideas. The establishment of independent surgical schools teaching physiology, pathology, and therapeutics and the explosive growth of a plethora of public and private courses of medicine, all outside the faculties' control, emphasized that the monopoly had been effectively breached. Just as faculty professors in the eighteenth century had far less control over the output of the medical press, an instrument of democratization that in earlier centuries had been almost entirely a professorial fief,[163] so they ceased to police the classroom. Moreover, professors in their official capacity were left teaching medical theory at a moment of time when advances in theory were deemed to be only possible through familiarization with the techniques of observation and analysis primarily taught outside the faculty's walls.[164] The faculties' failure, however, to keep abreast of the new needs of medical students should not totally be blamed on lack of resources or institutional inertia. Given the commercial rewards of private enterprise, arguably the disjunction effected between theoretical and practical tuition in the course of the century suited the very people who could have moved the faculties to take experiential learning more seriously.

The expansion in medical instruction outside the faculties, then, was a further blow to the traditional organization of the corporative medical community, above all promoting the independence of the surgeons. The corporative medical community, however, was not simply being destabilized by dint of state-induced

[162] See above, Ch. 7, *passim*. For a typical jaundiced comment by a 20th-cent. historian of medicine on the antediluvian nature of the faculty curriculum, see J. Léonard, *Les Médecins de l'Ouest au XIXe siècle* (3 vols.; Lille, 1978), i. 132–5.

[163] See above, Ch. 7, Sect. A; and esp. below, Ch. 9, *passim*, on the emergence of the surgeon as author.

[164] See above, Ch. 7, Sects. B and C.

structural change and the limitations of the faculty curriculum. A further factor undermining its strength and coherence was the growing proportion of trained medical practitioners who were outside the corporative system altogether or languishing in the smaller towns. There must have always been many trained practitioners plying their calling in unfavourable circumstances, but the proportion seems to have grown greatly in the course of the eighteenth century, especially the proportion of physicians. As we will see in Section D, the substantial rise in the number of trained practitioners over the century was never matched by an equivalent expansion in the membership of the more prestigious corporations.

D. Trained Practitioners: Numbers and Background

As in the sixteenth and seventeenth centuries, it is impossible to know precisely the number of trained practitioners in eighteenth-century France. However, by using the extant records of faculty graduates, it is possible to reconstruct a picture of the changing number of physicians over the century, and from the annual totals of graduates derive an estimate of the total numbers of physicians and surgeons.[165] In this period, too, our calculations are aided by the attempts of several historians in the last twenty years to establish rates of medicalization for different parts of France on the eve of the Revolution.[166]

At the turn of the eighteenth century graduate numbers had been falling for several decades, declining from some 70 per annum in the 1660s to 53 in the 1690s (see Table 3*a*). In the first decade this decline continued, but was then dramatically reversed. By the 1730s the number of graduations had regained the level of the 1660s, and by the 1750s there were over 100 per annum. Thereafter the figure stabilized, but numbers were rising again in the last decades of the Ancien Régime, reaching 125 per annum in the 1780s, or 135 if graduates from Strasburg are included (see Table 8*a*).[167] As in the sixteenth and seventeenth centuries, our knowledge of the total number of graduates each year is incomplete. Most importantly, we lack information about graduations in the Toulouse Faculty: an important lacuna for the Faculty contained some 12 per cent of French medical students in 1789.[168] However, the decennial averages are

[165] For the methodology, see above, Ch. 3, Sect. D.

[166] Most of these works are referred to in the notes below. Their drawback is that they provide information only about physicians and surgeons, and only for the 1780s. But this reflects their source base: various government enquiries initiated right at the end of the Ancien Régime.

[167] As we have noted on several occasions most Strasburg medical students still came from the German bank of the Rhine, so it may be wise to continue to discount them in the post- and in the pre-1700 totals: see above, n. 98.

[168] R. Chartier *et al.*, *L'Éducation en France du* XVI*e au* XVIII*e siècle* (Paris, 1976), 274: estimates of attendance in individual faculties; the matriculation register for Toulouse survives from 1760–85: see Julia and Revel, 'Étudiants', 484.

TABLE 8*a*. *Doctorates awarded in French faculties of medicine 1700–1790* (annual averages)

	Aix	Avignon	Besançon	Bourges	Caen	Montpellier	Pont-à-Mousson/Nancy	Orange	Paris	Reims	Strasburg	Valence	TOTAL[a]
1700–9	4.2	9.2	?	?	2.3	10.6	?	?	2.0	17.4	1.9	?	43.7
1710–19	2.7	8.7	?	?	4.9	15.7	?	?	3.9	25.4		?	62.1
1720–9	2.8	7.7	?	?	2.5	17.9	?	?	1.6	29.1		?	61.6
1730–9	2.5	5.6	?	?	4.3	30.4	?	?	4.1	35.3		?	82.2
1740–9	3.3	11.7	?	?	9.3	42.8	?	0.4	6.4	22.7		?	96.7
1750–9	2.0	6.7	?	?	10.4	50.7	?	0.3	5.3	21.7		2.5	100.4
1760–9	2.4	3.1	?	0.5	9.4	54.6	?	1.4	4.2	20.4		2.5	98.5
1770–9	2.6	1.8	4.7	0.7	10.2	64.9	?	3.1	4.5	24.0		2.1	118.6
1780–9	0.8	0.8	6.0	?	12.4	64.0	8.9	4.7	2.7	17.0	9.7	8.1	125.4

[a] The total does not include Strasburg

Source: D. Julia and J. Revel, 'Les Étudiants et leurs études dans la France moderne', in eid. (eds.), *Les Universités européennes du XVIe au XVIIIe siècle: Histoire sociale des populations étudiantes*, ii (Paris, 1989), 459–86.

not likely to be very inaccurate, since the absence of data from Toulouse remains, as in the 1680s and 1690s, partly compensated for by the proportion of foreigners taking a degree at Reims (see Table 8*b*).[169] It is certain that there cannot have been many more than 135 graduates per annum on the eve of the Revolution, for we know there were 2,458 physicians alive in 1803–6 who had taken their degree under the Ancien Régime. If we assume that physicians lived on average twenty-five years after their graduation, then the annual replacement rate would have been about 140.[170]

TABLE 8*b*. *Doctorates in medicine granted by the Reims Faculty to students from the British Isles 1680–1790* (annual averages)

	Graduates from the British Isles	TOTAL
1680–9	5.9	29.9
1690–9	3.5	21.0
1700–9	4.2	17.4
1710–19	12.2	25.4
1720–9	13.2	29.1
1730–9	18.3	35.3
1740–9	8.3	22.7
1750–9	7.6	21.7
1760–9	7.0	20.4
1770–9	7.8	24.0
1780–9	4.6	17.0

Source: BM Reims MS 1084, list of graduates of the Faculty of Medicine, Reims; Julia and Revel, 'Étudiants et leurs études', 480–1. MS 1084 is not a graduation register but an alphabetical list of Reims medical graduates compiled by the late eighteenth-century Faculty professor Raussin.

It seems safe to assume, then, that the number of doctorates bestowed in French faculties over the period 1700 to 1790 rose nearly threefold. The growth, however, was not distributed evenly. Almost three-quarters of the rise can be accounted for by expansion in the number of Montpellier graduates, from 10 to 60 per annum. By 1789 Montpellier was producing over half the country's

[169] It will be recalled that foreigners who took the 'quicky' degree at Reims could not practise in France.

[170] The calculation is based on the assumption that the number of physicians alive in 1803–6, had there been no Revolution, would have been in the order of 3,600 (2,458 + 50 per cent of 2,458 to account for the 12 years 1792–1803, or half a physician's working life, in which no graduations took place). See the calculation in Julia and Revel, 'Étudiants', 290–2. The base figure is taken from M. E. Antoine and J. Wacquet, 'La Médecine civile à l'époque napoléonienne et le legs du XVIIIe siècle', *Revue de l'Institut Napoléon*, 132 (1976), 83–7. Julia and Revel suggest the total number of graduations was actually about 160 p.a.

physicians, whereas in the seventeenth century the figure had never reached a third, and at the beginning of the eighteenth century was only a quarter. This did not mean that the southern faculty was controlling an increasing proportion of the country's medical students, for, while the number of Montpellier matriculands rose impressively over the century, they rose no faster than the overall number of graduates (see Table 8*c*). Rather, as the century wore on, more and

TABLE 8*c*. *Matriculands and graduates in medicine at Montpellier 1700–1790* (annual average)

	Matriculands[a]	Graduates
1700–9	26.6	10.6
1710–19	32.1	15.7
1720–9	31.1	17.9
1730–9	45.4	30.4
1740–9	61.4	42.8
1750–9	61.7	50.7
1760–9	67.5	54.6
1770–9	75.4	64.9
1780–9	73.4	64.0

[a] Matriculands = students matriculating for the first time. The matriculation register for Montpellier actually contains the names of *all* students each year.

Source: Julia and Revel, 'Étudiants et leurs études', 472–4.

more Montpellier students decided to take their degree at their Alma Mater, rather than travel elsewhere, a reflection perhaps of the growing reluctance of the properly graduated to serve alongside those who had gained their degree *à la hâte*.[171] Montpellier's gain was at the expense of the smaller faculties, like Avignon and Reims, which were notorious graduating mills. If Reims and other unprestigious faculties in the north of France continued to attract graduates in the second half of the eighteenth century, this reflected, as in the seventeenth century, the peculiar position of Paris. In the 1780s the French faculties only welcomed some 200 fresh medical students each year, primarily located in four to five faculties: Montpellier greeted some 75, Paris 55, Toulouse and Besançon 20 to 25, and Caen 15.[172] Yet Paris only ever graduated a handful of its matriculands. Deterred by the cost and

[171] For evidence of continued venality in granting degrees, see above, Sect. B. This reluctance may well have been partly contrived: it would have been one way of controlling recruitment to the medical colleges: see below, pp. 526–8.

[172] Figures for these and other faculties extrapolated from the data in Julia and Revel, 'Étudiants', 460–86. There were probably about 500 medical students altogether in French faculties in 1789: see Chartier *et al.*, *Éducation*, 274.

the academic hurdles a graduand had to climb to take a degree in the capital, the vast majority of Paris medical students took their doctorate in the provinces.[173]

On the supposition that the graduation totals we have are reasonably accurate, we can posit that the total number of physicians also rose threefold over the eighteenth century, from a low point of little more than 1,000 in the 1700s to a figure in excess of 3,000 in the 1780s—assuming again that physicians had a career-span of twenty-five years (see Table 8*d*).[174] Indeed, the rise may have been even steeper, since life expectancy for the profession was probably increasing significantly over the century.[175]

TABLE 8*d*. *Number of physicians, surgeons, and apothecaries in eighteenth-century France* (estimated totals)

	Doctorates (p.a.)	Physicians[a]	Surgeons[b]	Apothecaries[c]
1690–9	52.9	1,323	6,350	
1700–9	43.7	1,093	5,246	
1710–19	62.1	1,553		
1720–9	61.6	1,540		
1730–9	82.2	2,055		
1740–9	96.7	2,417		
1750–9	100.4	2,510	12,048	
1780–9	125.4	3,135	15,048	6,019

[a] Total based on an estimated average working career of twenty-five years
[b] Total based on a ratio of physicians to surgeons of 1 : 4.8
[c] Total based on a ratio of apothecaries to surgeons of 1 : 2.5

Note: The totals for surgeons and apothecaries are to be treated with caution. For the ratios used to derive these two totals, see below, pp. 521, 524.

Source: The doctorate column is based on figures in the 'Total' column in Tables 3*a* and 8*a*.

An idea of the number of physicians allows us in turn to estimate the total number of surgeons over the century, using the ratio of physicians to surgeons con-

[173] The difficulties in gaining a Paris degree, of course, reflected the fact that the doctorate brought instant access to practice in the capital.

[174] There is only one extant nationwide contemporary list of French physicians. This was a list of urban physicians drawn up in the 1780s but excludes Parisian doctors: see BFMP MS 2221. The list contains only 1,855 names. If the 150 Paris physicians are added, this suggests the physicians numbered 2,000, surely a gross underestimate. An unfinished, undated memo (from the same period?) gives 4,000–5,000 physicians for a population estimated at 18 million: see BFMP MS 2006, fos. 40–1. This figure seems too high, if, admittedly, a total of 4,000 physicians in 1789 would fit with Julia and Revel's estimate of 160 graduations per annum (160 × 25 years as a working practitioner).

[175] On rising life expectancy in the 18th cent., see above, Ch. 6, Sect. B. If physicians had a working life-span of thirty years in 1789, then the annual replacement figure in the 1780s based on the number of surviving Ancien Régime graduates in 1803–6 would have been considerably lower.

tained in a 1786 government survey of resident medical practitioners (physicians and surgeons) in six northern *généralités*, an area embracing a third of the French population. An analysis of this data by J.-P. Goubert has revealed a ratio of physicians to surgeons on the eve of 1789 of 1 to 4.8.[176] Using this ratio, we arrive at a total of only 5,250 surgeons in the 1700s but 15,000 on the eve of the Revolution. Admittedly, both figures must be treated with caution. In the first case, we have no way of knowing whether the ratio was constant across time; in the second, the figure is almost certainly too low. Studies by Gelfand, from different Ancien Régime sources, of the number of physicians and surgeons in several southern dioceses in the 1780s suggest a much wider ratio in other parts of France. While Goubert calculated there were only 3.7 surgeons per 10,000 inhabitants in the six northern *généralités*, Gelfand discovered 10 and 12.6 per 10,000 in the southern dioceses of Auch and Toulouse respectively, and found that the ratio of physicians to surgeons in the second diocese was 1 to 12.[177] It is highly unlikely that there were 30,000–40,000 French surgeons in the eighteenth century, as Gelfand maintains,[178] but a total of nearer 25,000, rather than 15,000, in the 1780s seems plausible.[179]

At the very least there is no reason to doubt that the number of surgeons, like the number of physicians, rose during the eighteenth century, if not necessarily to the same degree.[180] The number of apothecaries, on the other hand, may well have been static or declining. If in the sixteenth and seventeenth centuries it seems likely that the number of apothecaries was greater than the number of surgeons,[181] this cannot have been the case by 1789. Not only, as we saw in an earlier section,[182] were many apothecaries' corps in the last decades of the Ancien Régime too small to maintain their legal personality, but even in towns where they survived in some numbers their community was invariably smaller than the surgeons', as can be seen from the figures in Table 8*e*. This table provides details

[176] 'The Extent of Medical Practice in France around 1780', *Journal of Social History*, 10 (1976–7), 410–27. It seems highly likely that the Ancien Régime survey was incomplete. The survey contained 491 physicians (p. 415). If a similar number per head of the population had been found all over France in the 1780s, then there would only have been 2,116 physicians all told, less than the number actually surviving in the early 1800s.

[177] 'Monarchical Profession', 154–7; and id., 'Public Medicine and Medical Careers in France during the Reign of Louis XV', in A. W. Russell (ed.), *The Town and State Physician from the Middle Ages to the Enlightenment* (Wölfenbuttel, 1981), 108–9. The figures for the diocese of Toulouse exclude the city. The 1786 survey in Anjou revealed a ratio of 1 : 6: see Lebrun, *Hommes et la mort*, 144.

[178] 'Monarchical Profession', 153.

[179] The 1786 survey gave 2,356 surgeons for the six northern *généralités*, which would give a total for France of only 10,154. Goubert himself believed that many rural surgeons were not included: see 'Extent of Medical Practice', 413. The 1780s MS list referred to in n. 174, above (which contains surgeons as well as physicians) lists 1,945 provincial urban surgeons.

[180] J.-P. Goubert, *Malades*, 79, claimed the number of Breton surgeons rose 20 per cent in the period 1750–86. This work is the classic study of medicalization in the 1780s.

[181] See above, Ch. 3, Sect. D. [182] Above, Sect. A.

TABLE 8e. *Number of physicians, surgeons, and apothecaries in selected French towns in the 1780s*

	Population	Physicians		Surgeons		Apothecaries	
		no.	per 10,000	no.	per 10,000	no.	per 10,000
Paris	660,000	153	2.3	192	2.9	135	2.0
Over 50,000							
Lyons	146,000	32	2.2	77	4.8	23	1.6
Bordeaux	111,000	16	1.4	88	7.9	22	2.0
Marseilles	110,000	34	3.1	70	6.4	14	1.3
Nantes	80,000	12	1.5	40	5.0	?	
Rouen	73,000	9	1.2	39	5.3	8	1.1
Toulouse	53,000	40	7.5	32	6.0	17	3.2
Versailles	51,000	?		18	3.5	?	
Nîmes	50,000	12	2.4	22	4.4	11	2.2
Average			2.8		5.4		1.9
Over 30,000							
Orléans	48,500	10	2.1	16	3.4	14	2.9
Amiens	44,000	8	1.8	11	2.5	8	1.8
Metz	36,500	10	2.7	15	6.6	16	4.1
Rennes	35,000	10	2.9	18	5.1	?	
Nancy	33,000	14	4.2	15	4.5	7	2.1
Angers	32,000	12	3.8	20	6.3	10	3.1
Besançon	32,000	28	8.8	15	4.7	13	4.1
Caen	32,000	14	4.4	17	5.3	11	3.4
Clermont	32,000	10	3.1	10	3.1	5	1.6
Montpellier	32,000	34	10.6	36	11.3	13	3.9
Reims	32,000	7	2.1	8	2.5	9	2.8
Brest	30,000	6	2.0	15	5.0	?	
Average			4.0		5.0		3.0
(– Besançon & Montpellier)			(2.7)		(4.3)		(2.4)

Over 20,000							
Montauban	29,000	6	2.1	11	3.8	18	2.8
Aix	28,500	14	4.9	19	6.7	?	
Troyes	28,000	5	1.8	8	2.9	?	
Arles	25,000	11	4.4	20	8.0	7	2.8
Grenoble	25,000	11	4.4	13	5.2	5	2.0
Dijon	22,000	10	4.5	12	5.6	6	2.7
La Rochelle	21,500	4	1.9	19	8.8	11	5.1
Arras	20,000	11	5.5	16	8.0	9	4.5
Béziers	20,000	6	3.0	7	3.5	2	1.0
Average			3.6		5.8		2.7
5,000–15,000							
Alençon	13,500	4	3.0	1	0.7	?	
Châlons s.M.	12,000	11	9.2	8	6.7	4	3.3
Auxerre	10,500	5	4.8	9	8.8	4	3.8
Cherbourg	10,000	7	7.0	2	2.0	1	1.0
Albi	9,000	1	1.1	2	2.2	?	
Pau	8,500	5	5.9	7	8.2	5	5.9
Soissons	8,000	4	5.0	7	8.8	5	6.3
Valence	7,500	5	5.3	2	2.1	6	8.6
Bourg-en-Bresse	7,000	4	5.7	5	7.2	4	5.7
Average			5.3		5.2		4.9
Under 5,000							
Villefranche-sur-Saône	4,500	7	15.6	5	11.1	2	4.4

Sources: D. Roche, *Le Siècle des lumières en province: Académies et académiciens provinciaux 1680–1789* (2 vols.; Paris, 1978), ii. 348, 352, 358; P. Benedict (ed.), *Cities and Social Change in Early Modern France* (London, 1989), 24–5; J.-P. Goubert, *Malades et médecins en Bretagne 1770–1790* (Rennes, 1974), 476–9; BFMP MS 2221, a 1780s list of urban physicians and surgeons; AM Reims R *fonds ancien* 680–1, *capitation* register 1787; *Almanach Royal* (Paris, 1789), lists of Paris physicians, surgeons, and apothecaries, 484–7, 628–40. Where Roche and Benedict give different population figures for a town, Benedict has been followed.

of the numbers of apothecaries and surgeons in thirty, primarily large, French towns in the 1780s. On average there was only 1 apothecary for every 2.34 surgeons. Information provided by J. P. Goubert about the number of apothecaries and surgeons in forty-eight Breton towns and *bourgs* in 1750 reveals a similar ratio: 1 to 2.66.[183] It seems reasonable to suppose, therefore, that the number of surgeons was some two and a half times as great as the number of apothecaries in 1789, and that the total number of apothecaries was between 6,000 and 10,000 depending on the figure chosen for the number of surgeons.

Physicians and apothecaries in the eighteenth century still seem to be predominantly urban-based. All the studies of medicalization concur in finding few examples of physicians resident in the countryside. Rural surgeons, in contrast, seem to have been relatively abundant in the last decades of the Ancien Régime, thereby ensuring the permanent presence of many more trained practitioners in the French countryside and laying the foundations for the medical reformers' dream of a network of rural outworkers, serving under the physicians' instructions.[184] The number of rural surgeons, however, varied greatly from region to region. In the *généralité* of Rennes in 1786, there were only 1.3 rural surgeons per 10,000 inhabitants, but in the generality of Amiens the figure was 7.2.[185] The Toulouse hinterland was probably even better served, with a resident barber-surgeon in a quarter of the 200 villages in 1783, and no one more than 4 kilometres from his nearest trained practitioner, a fact that has led Gelfand to argue that the French peasantry had better access to trained medical care in the second half of the eighteenth than it did in the second half of the nineteenth century.[186]

A threefold rise in the number of physicians over the eighteenth century, if not of surgeons and apothecaries, would suggest that the graduate branch of the medical community was well positioned by 1789 to take on the wider medical role outlined in Chapter 7. As the population over the same period had only increased by a third, from 21 to 28 million, then the number of physicians per 10,000 had increased from 0.51 to 1.11, or if, more realistically, the figure is calculated for urban France (20 per cent of the population), from 2.54 to 5.48.[187] The physicians, however, were not so well placed as they seem at first sight. First, it is clear that the dramatic increase in graduations occurred in the first

[183] *Malades*, 468–9 (table). [184] See above, Ch. 7, Sect. D.

[185] J. P. Goubert, 'Extent of Medical Practice', 414.

[186] 'Monarchical Profession', 154–5 and 165–9. The argument depends for its viability on the quality of the medical care offered by the rural surgeons: the medical reformers, it will be recalled, were not impressed.

[187] Although some towns grew rapidly in 18th-cent. France it is generally assumed that the proportion of people living in towns over 2,000 remained much the same; e.g. the case of Dauphiné, explored in R. Favier, 'Economic Change, Demographic Growth and the Fate of Dauphiné's Small Towns 1698–1790', in P. Benedict (ed.), *Cities and Social Change in Early Modern France* (London, 1989), ch. 7.

part of the century; it did not replicate the growth in the population, which began from the 1730s and was fastest at mid-century. In the period when the population actually did rise, the number of graduations rose by only 29.6 per cent (1740s to 1790s), little different from the population generally. Second, while the population only rose by a third, the élite, measured in terms of the bourgeoisie at least, may well have tripled in size. If this were the case, then the expansion in the number of physicians merely kept pace with the growth in size of their traditional clientele, at a time when, as was seen in Chapter 6, the potential demand for medical services among this sector of the population was growing for a mixture of demographic, economic, and cultural reasons.[188]

Above all, the growth in the number of physicians within the urban sector appears to have been highly uneven, so that in the 1780s graduate doctors were relatively abundant in small towns, but conspicuously thin on the ground in the real centres of French wealth, where one would expect to find the heaviest call on their art (see Table 8*e*). Paris was by far the largest city in the country throughout the eighteenth century, but in 1789 the population of 660,000 was officially served by only 153 Paris graduates, a mere 2.3 per 10,000, far less than half the urban average.[189] Other towns in France with large populations on the eve of the Revolution, notably the vibrant port cities of Bordeaux, Nantes, and Marseilles, were no better provided.[190] Indeed, only three towns with more than 20,000 inhabitants in 1789 played host to an above-average number of physicians: Besançon, Toulouse, and Montpellier—all three, significantly, faculty towns.[191] Towns with 5,000–15,000 inhabitants, on the other hand, seem to have been much better placed. If some, like Albi, were poorly provided with physicians, others like Châlons-sur-Marne with 9.2 per 10,000 inhabitants were better placed than modern cities.

All the same, most towns in the 5,000–15,000 range still only seem to have been served by a number of physicians close to the urban average. If true, this can only mean that the smaller towns with 2,000–5,000 inhabitants were particularly well endowed with physicians in 1789. Twenty years later 498 out of the 722 towns in France with populations over 2,000, possessed 2,000–5,000

[188] See above, Ch. 6, esp. Sects. B and C.

[189] Admittedly, this figure does not include the court physicians who could also legally practise in Paris: see above, Ch. 4, Sect. B.

[190] The Marseilles figure may be inflated. According to T. Gelfand, 'The Training of Surgeons in Eighteenth-Century Paris and its Influence on Medical Education', Ph.D. diss., Johns Hopkins Univ., 1973, p. 371, there were only 18 physicians in the town in the 1770s. On seeking admission to the Marseilles college in 1775, Claude-François Achard was only examined by 13 physicians: see BM Avignon MS 2368, Achard to Calvet, 28 July 1775.

[191] Presumably Toulouse and Besançon, like Montpellier, offered degrees at a moderate price which gave graduates the automatic right to practise in the locality. At Montpellier, and perhaps at the other two towns, the number of physicians was swelled by the opportunity of offering medical students private instruction.

inhabitants, and these contained 30 per cent of the urban population.[192] The situation can have been very little different on the eve of the Revolution, so the majority of graduate physicians in the late eighteenth century must have been practising in small, sleepy market towns. The typical physician in 1789 was not the Paris Faculty doctor, but figures such as Pellisier of Saint-Rémy-de-Provence, the parameters of whose practice we explore in Section E.[193] This was very different from the position before 1700, when few physicians could have been found practising permanently in any but towns over 5,000 inhabitants.[194] It meant, inevitably, as Pellisier's casebook reveals, that physicians and the people moved closer together, for the number of affluent patients in small-town France was limited.

Ironically, the geographical expansion of faculty medicine was achieved at the expense of the big cities. It is even possible that the relative presence of physicians in the largest cities declined over time, although the paucity of data before the 1780s makes this difficult to prove. Certainly, the populations of Lyons, Bordeaux, and Nîmes were much better served at points in the seventeenth century than they were on the eve of the Revolution (see Table 3*d*). Yet, even if the history of these three cities was unrepresentative, it can be safely assumed that the relative presence of physicians in large towns hardly improved over a century when the demand for medical care must have been growing. In the capital, where the ratio of physicians to population can be calculated successfully over the entire period 1500 to 1789, the situation merely stagnated (see Tables 3*c* and 8*f*). There were no more physicians per 10,000 of the Parisian population in 1789 than there had been in the 1650s.[195] Not surprisingly, then, there was only a handful of recruits to the country's medical colleges over the eighteenth century, despite the fact that annual numbers of medical graduates rose threefold to some 135. Nîmes admitted 24 between 1700 and 1790, Angers 31 between 1694 and 1785, and Paris 347 between 1700 and 1789, still less than 4 per annum.[196]

The failure of the country's medical colleges to expand as quickly as the number of graduate physicians (and in the first half of the eighteenth century the

[192] P. Benedict, 'French Cities from the Sixteenth Century to the Revolution: An Overview', in id., *Cities and Social Change*, 10.

[193] The supplications of provincial apothecary journeymen who applied to the Paris community to regularize their position often reveal the presence of physicians in small towns: e.g. there were two physicians in the Norman town of L'Aigle in 1774: see BN MS Fr. 14821, fos. 31r–32r.

[194] They may have been found in smaller towns as bachelors *en passant*: see above, Ch. 3, Sect. D, for the early careers of Laurent Joubert and Thomas Platter.

[195] A study of the capitation records of Reims in 1701 and 1787 (AM Reims R *fonds ancien* 591 and 680–1) suggests the same conclusion. Over the period 1700–90 the town's population hovered around 31,000–32,000 and the number of physicians around 6–7.

[196] Figures from BM Nîmes MS 425, college minute-book; Lebrun, *Hommes et la mort*, 145; annual number of Paris doctors in Julia and Revel, 'Étudiants', 478.

TABLE 8*f*. *Physicians, surgeons, and apothecaries in eighteenth-century Paris (selected years)*

	Population	Physicians		Surgeons		Apothecaries	
		no.	per 10,000	no.	per 10,000	no.	per 10,000
1699	510,000	102	2.0				
1709		97					
1719		96		248			
1729		87		267			
1739		104		278			
1749	570,000	125[a]	2.2	273	4.8		
1759		141		269		81	
1769		150		232		86	
1779		159		206		123	
1789	660,000	151	2.3	192	2.9	135	2.0

[a] The physicians still only numbered 100 in 1744.

Source: BFMP MS 17, Faculty minute-book, *sub anno* 1699, list of doctors-regent recorded before the minutes for that year; *Almanach Royal*, *sub annis*; the *Almanach* begins in 1704 but an annual list of surgeons is only given from 1714 and apothecaries from 1754. The location in each volume of the lists of physicians, surgeons and apothecaries is given in the volume index.

Paris corporation did not grow at all) suggests that their incorporated members were deliberately keeping numbers down to take advantage of the rising demand for their services. Arguably, incumbent physicians in the big cities were using their corporative power to frustrate the free play of market forces and maximize their personal income. The consequences of this development for the coherence and solidarity of the community of graduate physicians cannot be underestimated. The relative paucity of graduate doctors in the large cities in the eighteenth century obviously had an important effect on the percentage of physicians who belonged to a medical college. It is always likely that incorporated physicians were in a minority, but in the seventeenth century, although hard data is lacking, they can seldom have formed less than a third of the total. At the end of the Ancien Régime, in contrast, they comprised no more than 450 of the estimated 3,100 physicians, less than 15 per cent.[197] At the same time, as the number of graduate physicians rose, so the numerical weight of the Paris college declined. In 1700 some 10 per cent of all physicians belonged to the Paris corporation; by 1789 less than 5 per cent did so. These changes cannot but have had an effect on the way non-corporate physicians viewed the corporative system. In the seventeenth century many provincial graduate physicians may have found the privileges of the Paris college frustrating, but most presumably had expectations of one day

[197] A figure based upon the information in Tables 8*d* and *e*, and data extracted from BFMP MS 2221, directory of urban physicians and surgeons, *c.*1780, listed alphabetically by town.

entering a corporation or setting up in a reasonably large town. They would have had no reason to be disillusioned with corporatism; even the Chambre royale had attempted to form its own corps.[198] In the eighteenth century, on the other hand, most physicians had no chance of entering a college and were condemned to small-town life. Presumably, in an age when corporatism was under attack anyway, they would no longer have had any material interest in maintaining the corporative system with its exclusive rights of practice.

The surgeons in the eighteenth century, in contrast, would have had less difficulty in maintaining community consciousness. If there really were 400 corporations of surgeons in France by 1789, then one can assume that not only was there a community in every town of more than 5,000 inhabitants but a corps, too, in over a third of the towns between 2,000 and 5,000 people.[199] Unlike the physicians, the majority of eighteenth-century surgeons must have been always incorporated, even if there were undoubtedly many surgeons living an independent existence in the countryside. Indeed, if all the 400 corporations were legally active in 1789, they contained a minimum of 12,000 of the putative 15,000–25,000 surgeons then deemed extant. In reality they presumably contained many more.[200]

None the less, if attention is concentrated on urban France, it is clear that trained surgeons, just like trained physicians, must have been disproportionately represented in the smallest towns. A study of Table 8*e* reveals that even the minimum ratio of physicians to surgeons of 1 to 4.8 did not pertain in the 200 French towns with more than 5,000 inhabitants. The ratio was seldom even 1 to 2, and in some cases the physicians outnumbered the surgeons. If the number of surgeons per 10,000 inhabitants in towns over 5,000 did not vary significantly according to the size of the town, in contrast to the number of physicians, there can be no gainsaying the fact that surgeons in the larger towns of France were thin on the ground. On average in towns over 5,000 there were only 5 to 6 surgeons per 10,000 inhabitants, fewer even than the number of rural surgeons in the *généralité* of Amiens. The 1.6 million Frenchmen living in the 500 towns with 2,000 to 5,000 inhabitants must have been much better served, even if there were only 2 or 3 surgeons in each. This is clearly revealed by J. P. Goubert's analysis of the distribution of both physicians and surgeons in the towns of the six northern *généralités*. While the thirty-one towns with populations of more than 10,000 were served by some 6 surgeons per 10,000 inhabitants, 7 surgeons

[198] For this rival institution to the Paris Faculty, see above, Ch. 5, Sect. E.

[199] Gelfand, 'Monarchical Profession', 154–5, claims that half the surgical communities were found in towns with less than 4,000 inhabitants.

[200] For active and passive corporations, see above, Sect. A. Gelfand, 'Monarchical Profession', 155–6, claims only 100 of the 400 communities had more than six members (see esp. map, p. 156).

per 10,000 served the thirty-two towns of 5,000–10,000 inhabitants, and 10 per 10,000 the sixty towns of 2,000–5,000.[201]

It is hard not to conclude that the surgical communities in even moderately sized towns were apeing the behaviour of most physicians' corps and also operating some form of *numerus clausus*. Although we know little about the secular trend in different corps, it can be assumed that numbers in these 200 communities grew only slowly over the century, especially in the élite corporations. Thus, only 21 surgeons were received at Avignon between 1747–86, 39 at Nancy between 1772–92, and 238 at Paris from 1749–89, half the number of the first four decades of the century.[202] At Paris the number of surgeons actually declined in the last decades of the Ancien Régime from a peak of 280 in 1755 to 192 in 1789.[203] Although the decline in part must reflect the formal separation of the art of surgery and barbering in the capital in 1743, and the concomitant insistence that Paris surgeons be trained in the Latin and Greek humanities and philosophy and hold an MA, this can only be part of the story as the decline began ten years later.[204] At Paris in particular a policy of selective recruitment must have operated in the final decades of the Ancien Régime to ensure that by 1789 the population had scarcely any more legally practising surgeons at its disposal than physicians (2.9 per 10,000 in 1789 against 2.3).[205]

In the case of both the physicians and surgeons, therefore, the eighteenth century was a period of numerical expansion but apparently deliberate corporative ossification. Moreover, the élite apothecaries' corps seem to have been equally closed. In the 1780s there were on average only 1.9 apothecaries per 10,000 inhabitants in provincial towns over 50,000 and 2.6 per 10,000 in towns over 30,000, against 4.9 per 10,000 in towns between 5,000 and 15,000 (see Table 8*e*). As the example of Reims reveals, access to apothecaries' corporations in the big cities must have been always restricted: only eleven apothecaries joined the Reims corps between 1750 and 1789.[206] Arguably, in the case of all three branches, the heart of the corporative medical community was relatively shrinking and becoming inaccessible to the large majority of trained medical practitioners, who were being forced out into the fringes of the medical penumbra.

[201] 'Extent of Medical Practice', 422, table 3. Goubert confirms the impression given by Table 8*e* that the number of physicians per 10,000 rose steadily as the size of the town declined, from 1.7 in the four cities of 80,000–160,000 inhabitants to 5.78 in the sixty towns of 2,000–5,000.

[202] BM Avignon MS 2289, 'Livre de la réception des maîtres chirurgiens 1682–1781'; Gelfand, 'Training of Surgeons', 182; id., *Professionalizing Modern Medicine*, 77.

[203] Figures in *Almanach Royal*, *sub annis*: the location of data about the corporative medical community in the *Almanach* can be discovered through the index at the end of each vol. The number of surgeons at Reims also declined over the century from 19 in 1701 to 8 in 1787: see AM Reims R *fonds ancien* 591, 680–1: capitation registers.

[204] For the 1743 reform of Paris surgery, see above, Sect. A.

[205] To the figure of 192 must be added the 50-odd court surgeons: see below, Sect. F.

[206] BM Reims MS 1084, no. 3, apothecaries matriculation register.

The mechanisms of exclusion were chiefly fiscal and academic. As we saw in an earlier section, the hurdles that had to be officially cleared to enter a prestigious corps were frequently becoming more onerous as the century progressed. There again, as we equally saw, not every corps in a large town tightened its official entry procedures, so there must have been other undeclared forces of exclusion at work.[207] Some corps operated a real *numerus clausus*: at Montpellier, for instance, surgeons could gain entry to the corporation but they could not open a *boutique* in the town until one of their colleagues had died.[208] Others effectively barred candidates because of their social background. Thus, Bernard-Félix Bourriat, a Montpellier graduate, was refused membership of the Poitiers College of Physicians in 1782 and forced to go to Tours on the grounds that his father was a Poitiers apothecary and hence the college's servant.[209] Another trick was to prevent a qualified candidate from ever presenting his case. In the early 1760s a journeyman-pharmacist called Louis-Jacques de La Valée wished to join the apothecaries' guild at Amiens. Although he had fulfilled the entrance requirements by serving a three-year apprenticeship with a local apothecary, one Desprez, then working for six years as his assistant, he was unable to present his request because his master refused to sign the required testimonial. La Valée took Desprez to court and received a judgement in his favour from the Amiens *lieutenant-général de police*, but to no avail, and he was eventually forced to appeal to the royal council.[210]

Such shenanigans went on at the highest level. From 1694, it will be recalled, 'foreign' graduates could theoretically join the Paris College of Physicians by taking the doctoral examinations without studying for four years on the faculty benches.[211] The existence of this right, however, did not necessarily guarantee that it could be exercised, and the small number of 'foreign' doctors who availed themselves of the privilege over the eighteenth century (after the initial rush of members of the erstwhile Chambre royale) suggests that the obstacles to joining the Paris college were not just academic and financial. The few outsiders who did make the leap were either foreigners to whom the college was indebted, such as Jean Astruc who had defended the Parisian physicians' right to supervise the treatment of venereal disease,[212] or doctors with an established reputation and good connections at court, like Théophile de Bordeu. The latter became a

[207] See above, Sect. A. [208] Dulieu, *Chirurgie*, 100.

[209] P. Rambaud, *La Pharmacie en Poitou jusqu'à l'an XI* (*Bulletin et Mémoires de la Société des Antiquaires de l'Ouest*, 2nd ser. 30; Poitiers, 1906), 644–6.

[210] BN MS Fr. 14821, fos. 3–5: the council ordered the Paris apothecaries to certify La Valée's competence and granted him letters to set up his shop in Amiens.

[211] See above, Ch. 5, Sect. E.

[212] He became a Montpellier doctor in 1702; from 1730 he was in Paris as a royal physician and professor of the Collège Royal; he became a Paris MD in 1743 without even having to take the examinations. For his life, see Jean Astruc, *Mémoires pour servir à l'histoire de la faculté de médecine*

member of the Paris college in 1754, eleven years after taking his doctoral degree at Montpellier. When he arrived in Paris in late 1751 to begin the process of gaining a second degree in the capital, he was no fresh-faced rookie from the provinces come to try his luck in the metropolis, but a seasoned author, well known to Parisian society, who had already made protracted visits to the city on two former occasions. In particular, he had spent the years 1748 to 1749 using the contacts of his relative Louis de La Caze, physician to the duc de Chartres (later duc d'Orléans), to become acquainted with the king's premier physician Jean-Baptiste Sénac (1693–1770) and government ministers.[213] Moreover, Bordeu's subsequent history reveals that even foreigners who did force their way in to the Paris Faculty might subsequently rue their temerity. In 1761 a cabal led by Michel-Philippe Bouvart accused Bordeu of stealing the personal effects of the marquis de Poudenas, who had died in the physician's care, while *en route* to take the waters at Barèges. Bordeu was struck off the register of Faculty doctors and only reinstated in the spring of 1764, after he had obtained a decree on his behalf from the Paris Parlement.[214]

Even physicians (and presumably surgeons and apothecaries, too) who practised in towns where there was no corporation would do their best on occasion to prevent outsiders joining their ranks. A useful strategy was to claim to the local authorities that a newly arrived colleague's credentials were not in order. Avignon graduates in particular seem to have had difficulty in setting themselves up in a non-corporate town, for incumbent physicians had little difficulty in convincing the king's representative that the Faculty's degrees (bestowed in a papal town outside the crown's control) were granted too readily. A typical victim of professional self-righteousness was one Guinault Descréaux, who established himself at Auxerre in 1786 and was consequently blackballed by his five colleagues ostensibly because of his dubious degree. Descréaux claimed that his only fault was to have been immediately professionally successful, but his defence cut no ice with the authorities and he was forced to undergo another examination in front of the Paris Faculty in order to remain in practice in the town.[215]

de Montpellier (Paris, 1767), ed.'s pref., esp. p. xlix. Besides his treatise on venereal disease, referred to above, Ch. 7, Sect. D, Astruc published a number of open letters in the late 1730s attacking the surgeons: see below, Ch. 9, Sect. D.

[213] Bordeu, *Correspondance*, i and ii, *passim*. In Bordeu's case contacts and reputation must have been everything, for he was relatively indigent and had to rely on the charity of patrons and friends to pay for his degree; at one stage, when he fell out with La Caze, it seemed as if he might have to abandon his attempt: see ibid., esp. ii. 114–19: Bordeu to his mother, May 1754.

[214] Ibid. ii. 222–6: the editor's account of the affair; the accusations led to Bordeu being pursued by the authorities in Guyenne where the theft supposedly took place: see esp. 284–6: letter of Bordeu's brother to their father, 23 Oct. 1761.

[215] AD Vaucluse D 62, unnumbered collection of letters and memos concerning the Avignon Faculty. In the subsequent examination, Descréaux was revealed to be a poor Latinist.

However, if this was a period of growing corporative ossification and exclusivity, this did not mean that the majority of practitioners had never rubbed shoulders with the privileged élite of their profession. Just as the graduate doctor had attended the public and private courses of the corporative physicians of Paris, Montpellier, and other faculty towns, so the tiro surgeon and apothecary had spent a period of time in the big cities attending lectures or working as a journeyman, as in the sixteenth and seventeenth centuries. Gelfand discovered that 30 per cent of the 225 surgeons who received their mastership from the Auch community between 1766 and 1789 had studied in Paris, and a further 20 per cent had received formal instruction in other towns.[216] Equally, most of the provincial apothecaries, who were given the right to set up shop in the small towns of northern France by the Paris community in the final decades of the Ancien Régime, had passed through the capital. Thus, Pierre Epinard, licensed in 1772 to establish himself at Mantes on the Seine was a native of Quarré in Anjou, who had served ten years as an apprentice and journeyman to a merchant-apothecary of Château-Gontier, then moved to Paris via Saumur, where he had passed a further five years in the service of the apothecary Treves, before proceeding to Mantes in 1770 to work for the widow Saint-Vincent.[217] The *tour de France* was clearly alive and well on the eve of the Revolution, although the continued possibility of fraternizing in some way with the élite of the corporative community may have made the virtual impossibility of joining it even more frustrating.[218]

Nor, paradoxically, did the exclusivity of the more prestigious medical corps intensify the dynasticism already deeply entrenched in the corporative community.[219] Undoubtedly, family dynasties persisted in the élite corps. The Montpellier medical family, the Haguenot, for instance, provided three generations of apothecaries in the town in the eighteenth century, beginning with Daniel, son of the physician Pierre the Younger (1643–91), who matriculated in 1695. Two of Daniel's grandsons and great-grandsons, moreover, were apothecaries at nearby Pézenas—the first, Jean-Daniel, opening his shop a year after his younger brother Jean-Louis established himself in Montpellier in 1768.[220] But

[216] 'Public Medicine and Medical Careers', 113. The figure of 225 comprises surgeons of all three classes: for the distinction, see above, Sect. B.

[217] BN MS F. 14821, fos. 19v–21r: licensed 21 May 1772.

[218] Many journeymen may well have preferred to spend their lives serving masters in big towns, for some were already in late middle age when they settled down, often in the town or village where they were born: see Gelfand, 'Monarchical Profession', 158.

[219] See above, Ch. 3, Sect. D.

[220] Information from the biographical entries under Haguenot in L. Dulieu, *La Pharmacie à Montpellier de ses origines à nos jours* (Avignon, 1973), 256–7. Another branch of the family provided two Montpellier professors in the 18th cent.: Jean-Henri Haguenot (1643–1730) and his son Henri (1687–1775), who bequeathed his vast library to the faculty.

such generational continuity was uncommon: only about a third of Montpellier apothecaries in the eighteenth century were sons of members of the corporation, and this was equally true of Avignon surgeons.[221] Generational continuity hardly existed in the physicians' corps. Although most Paris physicians were the sons of provincial doctors, hardly any placed their own offspring on the faculty benches.[222] At Nîmes only two of the twenty-four physicians admitted were directly related to existing members of the college.[223] This would suggest that the policy of closure in the physicians' case was highly effective, allowing the lucky few to take advantage of a growing medical market to make enough money to launch their children into less tiring careers, if few can have done as well for themselves as the Paris and court doctor Jean-Claude-Adrien Helvétius (1685–1755), son of the popularizer of ipecacuanha, who turned his own son, the *philosophe*, into a financier and tax-farmer.[224]

The élite corporations, then, were evidently not totally closed. They opened their doors to admit new blood but only the fortunate few, a situation which may well have merely added to the feelings of frustration among the excluded majority.[225] The limited and perhaps even unpredictable possibilities of access may also help to explain why the social background of trained medical practitioners does not seem to have changed in the course of the century. As in an earlier period, most physicians were the sons of medical practitioners, while surgeons, if not sons of surgeons themselves, were drawn substantially from artisanal or rural backgrounds.[226] What is clear is that few men of noble birth entered the corporative medical community, despite the fact that the Enlightenment had

[221] Ibid., biographical app.: the sample may be incomplete; BM Avignon MS 2289, surgeons' reception book (8 out of 21 admissions).

[222] Conclusion based on random biographical material and a study of the faculty minute-book: BFMP MS 17–24 and *Commentaires*, ed. Steinheil (annual lists of faculty doctors at the beginning of each year's minutes).

[223] BM Nîmes MS 425, college minute-book. Of the 31 physicians who joined the Angers college 1694–1784, 8 were sons of college members: Lebrun, *Hommes et la mort*, 145.

[224] For other court physicians, see below, Sect. E.

[225] As was arguably true of the limited openness of many other Ancien Régime corporative institutions. The destabilizing effect of institutional blockage was originally pointed out by A. Cobban, 'The Myth of the French Revolution', in id., *Aspects of the French Revolution* (London, 1971 edn.). His thesis has since been refined, notably in a wide-ranging article by D. Bien, 'La Réaction aristocratique avant 1789: L'Exemple de l'armée', *Annales ESC*, 29 (1974), 23–48, 505–34. Also, see more recently, Bossenga, *Politics of Privilege*. This is the first time the problem has been explored in the medical realm.

[226] Random biographical data; also Gelfand, 'Monarchical Profession', 157, 176 n. 22, on the background of surgeons received at Auch, Toulouse, and Bordeaux; and E. Lemay, 'Thomas Hérier: A Country Surgeon Outside Angoulême at the End of the Eighteenth Century', *Journal of Social History*, 10 (1976–7), 525, on the background of surgeons apprenticed at Angoulême 1763–77. Some physicians came from quite humble backgrounds: Antoine Petit was the son of a tailor but became a Paris physician. Too little is known about the origin of apothecaries to reach any conclusion.

reversed the traditional hierarchy of the sciences and medicine had theoretically become a much more respectable profession.[227] The failure to attract people of breeding into the community was worrying some physicians, such as Gilibert, by the end of the Ancien Régime, and the absence of gentlemen practitioners was noted, disparagingly, by English-speaking travellers.[228] The relative closure of the élite corps, however, and the mysterious mechanisms whereby the barriers were lifted from time to time, would hardly have tempted an indigent rural nobleman to pursue a career in physic rather than arms. Moreover, for all the Enlightenment rhetoric, the career of medicine still lacked the social recognition long since accorded the law. Above all, although the Montpellier Faculty fought hard to have its professors recognized as members of the second estate, it remained the case that no position in the corporative medical community was automatically ennobling.[229]

The exclusiveness of the élite medical corps may well have guaranteed their members a comfortable existence, but it condemned the majority of their colleagues to a life of grubbing for patients in small market towns and their rural hinterland, once again helping to feed disillusionment with the corporative system. In the seventeenth century there had been a vast gulf between the rewards of court and private practice. As we shall see below, the court remained the arena for spectacular professional gain, but there was now an equally important gap opening up between the cushioned corporative practitioner and the less fortunate outsider. This second gulf, moreover, was difficult to close significantly because in the main trained practitioners of all kinds continued to ply their occupation in the traditional practitioner-orientated way.

E. The Sick and their Practitioners

In Chapter 5 we showed that the large majority of members of the corporative medical community in the sixteenth and seventeenth centuries found their clients among the urban élite. Although the poor were not completely devoid of the services of trained practitioners—indeed, some physicians went out of their way to treat the dispossessed—they none the less usually only came into contact with corporative medicine when they were *in extremis*. The socially restricted

[227] On the new attitude to medical science in the Enlightenment, see above, Ch. 6, Sect. C. Jaucourt, of course, a Leiden graduate, was a noble, but he took a foreign degree and did not practise.

[228] Jean-Emmanuel Gilibert, *L'Anarchie médicinale, ou la médecine considérée comme nuisible à la société* (3 vols.; Neuchâtel, 1772), ii. 10–11: analysis of the Montpellier student body; Benjamin Rush (an American observer), 'Account of Journey to Paris 1769', in Pierpont Morgan Library, New York, MS MA 14, pp. 15–16, on Paris physicians.

[229] See AFMM C 88, 'Précis des demandes adressées par la faculté de Montpellier à M. le Premier Médecin', *c.*1760. The Reims professors did succeed in getting themselves placed on the noble *capitation* roll: see below, n. 263.

character of the medical community's clients in part reflected wider cultural divisions within the urban population—physicians in particular were part of the educated world of encroaching officialdom that the lower orders resented and distrusted. More immediately, the restricted character reflected the nature of contemporary medical practice. Trained practitioners were supposed to devote considerable time to their patients, visiting them at home at least twice a day. There was thus a limit to the number of patients that practitioners could look after in such circumstances, all the more since over-busy doctors were professionally frowned upon.[230]

In the eighteenth century there is no evidence that the rhythms of corporative medical practice changed substantially. Opinion-formers as different as the Jansenist Philippe Hecquet and the enlightened Jean-Emmanuel Gilibert continued to insist that physicians (and by implication surgeons) should have only a handful of patients, who should be assiduously cared for,[231] while those who stepped out of line could be quickly the target of community ire. When the famous Genevan doctor Théodore Tronchin was summoned to Paris in 1756 to inoculate the children of the duc d'Orléans, he was immediately inundated with a swarm of high-society patients anxious to consult with Voltaire's physician. The Paris Faculty was not amused by the swelling size of his list, and he was quickly accused of not examining his patients properly, not following their progress, and ultimately abandoning them to return post-haste to Geneva with a fistful of silver. Significantly, Tronchin himself accepted the strictures of his Parisian colleagues. He recognized that he saw too many patients in the capital but defended himself on the grounds that he had not actively sought so many clients; unconventionally, he had been besieged at home by 'a vaporous and curious crowd who had forced their way in'.[232]

Most graduate practitioners in large towns, then, must have continued to see only a few patients each day in the eighteenth century, and generally only patients of means. Dulaurens who claimed he had a daily list of forty patients on one occasion when practising in Rochefort (population *c.*20,000) in 1765 must have been exceptionally busy.[233] As in the sixteenth and seventeenth centuries, moreover, private practitioners were frequently forced to give their undivided attention to a single individual, at the expense of their normal practice. A physician in

[230] See above, Ch. 5, Sects. A and B.

[231] See above, Ch. 7, n. 244.

[232] H. Tronchin, *Un médecin du XVIIIe siècle: Théodore Tronchin, 1709–1781* (Paris, 1906), 85.

[233] *Essai*, 93: at the same time he was seeing 600 hospital patients. Vivant-Augustin Ganiare of Beaune (a town of 10,000 inhabitants) also had a large list in some years. His annual tally of patients over forty years ranged between 734 (1777) and 2,582 (1762). If the illness of his patients lasted on average a week, he would have seen 14 to 50 patients per day during his career. See BM Dijon MS 432, diary 1736–77: his patient tally is given at the end of each year; it is possible that the figure contains his hospital patients.

demand, like Esprit Calvet of Avignon in the second half of the eighteenth century, was continually on the move, visiting patients often 50 kilometres away.[234] The prestigious eighteenth-century physician, too, had a new call on his time, which must have further reduced his ability to see many patients: answering requests for a written consultation. If it was too far or expensive to expect the doctor to travel, then the patient or his representative provided an account of his malady by post and awaited a written reply. Although consulting by letter had existed in seventeenth-century France, it had not been a commonplace. In the eighteenth century, however, better postal communications and the development of letter-writing as an art form made the practice popular. Cynical or medically literate patients would even test the competence of the great and good by requesting a written consultation about ailments that they believed they themselves understood and could treat. In 1763, for instance, the francophobe Scottish surgeon Tobias Smollett (1721–71) was gratified to obtain an ill-informed (in his eyes) consultation by letter from the renowned Montpellier physician Antoine Fizes.[235] Replying to genuine or bogus requests could become a significant part of the physicians' activity in the eighteenth century. Society doctors in Paris, like Étienne-François Geoffroy, might write one a day. As written consultations were lengthy, carefully crafted, and often first composed in rough, they could take several hours to prepare.[236]

In such circumstances the poor would have remained unlikely to have been a prominent part of a city physician's private practice, unless, like Hecquet in the final years of his life, the physician had a reputation for receiving ordinary people at his home and giving free consultations.[237] As in the sixteenth and seventeenth centuries, the poor in the larger towns would have most frequently encountered members of the corporative medical community not as private practitioners, but as institutional doctors. Most of these would have continued to have

[234] On one occasion Calvet travelled as far as Alès, 75 km away, to see a spinabifida patient: see BM Avignon MS 2345, fo. 25r: Calvet to Vicq d'Azyr, 12 Oct. 1781. Esprit Calvet's activities as a practitioner in the second half of the 18th cent. can be reconstructed from his voluminous correspondence held primarily in the local libraries of Provence. L. W. B. Brockliss is currently preparing a book-length study of Calvet and his intellectual world.

[235] Smollett, *Travels Through France and Italy*, ed. O. Sitwell (London, 1949), 93–100.

[236] See L. W. B. Brockliss, 'Consultation by Letter in Early Eighteenth-Century Paris: The Medical Practice of Étienne-François Geoffroy', in A. La Berge and M. Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Amsterdam, 1994), esp. 85–94, an account of Geoffroy's mainly noble and clerical patients. The chapter is based on a study of Geoffroy's medical correspondence from the period 1700–30 in BFMP MS 5241–5. Many exx. of consultations by letter survive from the 18th cent., often in published form.

[237] [Lacherie], 'La Vie de M. Hecquet', in Philippe Hecquet, *La Médecine, la chirurgie et la pharmacie des pauvres*, ed. Lefèvre de Saint-Marc (3 vols.; Paris, 1740), iii, separately paginated app., pp. 66, 90. From 1726 Hecquet, paralysed, retired to a monastery where he received any patient who wished to see him.

been based in hospitals, but there was also a growing number of specifically designated poor doctors, who visited patients at home, by the end of the Ancien Régime. Some were appointed by local medical corps: from 1726 one member of the Nîmes college was chosen each year to treat the poor gratis.[238] Others were attached to charity boards (*bureaux de charité*) or charitable female confraternities, like the Montpellier Dames de la Miséricorde.[239] Yet others were established through the munificence of private benefactors, often the local *curé*. For twenty years in the 1770s and 1780s, for instance, the Paris physician Sallin and the surgeon Georges de la Faye (master 1731) looked after the poor of the parish of Saint-Roch at the local priest's behest. Aided by eight nuns who carried soup, tisanes, and bouillons to the sick in their own homes, they apparently normally looked after 100 patients at a time, but the number rose on occasion to 300.[240]

However, in contrast to the sixteenth and seventeenth centuries, physicians in the eighteenth century were no longer limited to the larger towns. As a result, the social profile of the private practice of the growing number of physicians who were forced to dwell in towns with less than 5,000 inhabitants would have been much less restricted. Whatever the constraints placed on the size of a physician's list by contemporary patient–practitioner ethics, there would always have been too few well-to-do sick people in smaller towns and their hinterland, for a physician simply to have found his clients among the local élite, as the casebook of Pellisier of Saint-Rémy-de-Provence in the 1760s reveals.[241]

In normal circumstances Pellisier only had some fifteen to twenty-five clients per month, and he seldom had more than four to five patients to visit in any one day. Closely following contemporary ethics, he was an assiduous doctor, who was not unknown to see the same patient three or four times per day, while the occasional invalid was visited persistently. The *avocat* Perriat, who lived close by the Saint-Rémy town hall, was visited on sixty occasions between April 1762 and October 1765. The number of patients he attended each day in his semi-urban practice was determined by their propinquity. If called away from town, as happened several times each month, he could be absent for many hours and often overnight. In April 1763 he spent four days attending a single patient: 'On the twelfth I went to Villargle [a nearby hamlet] to visit M. de Milit [or du Millet, a local notable]. I spent the night there. I was there on the fourteenth and I returned on the seventeenth. On the seventeenth I slept there. I returned

[238] BM Nîmes MS 425, fos. 50r–52r, minute 15 Oct. 1726.

[239] See the unclassified archives of this body in AD Hérault.

[240] [Pierre-Samuel Dupont de Nemours], *Idées sur les secours à donner aux pauvres malades dans une grande ville* (Philadelphia, 1786), 27–9. Antoine Petit left money in his will to establish an out-patient clinic for the poor in his home town of Orléans.

[241] BM Avignon MS 5178, 'cahier de visites', 23 Apr. 1762–15 Oct. 1765. This is the most detailed *cahier* so far discovered.

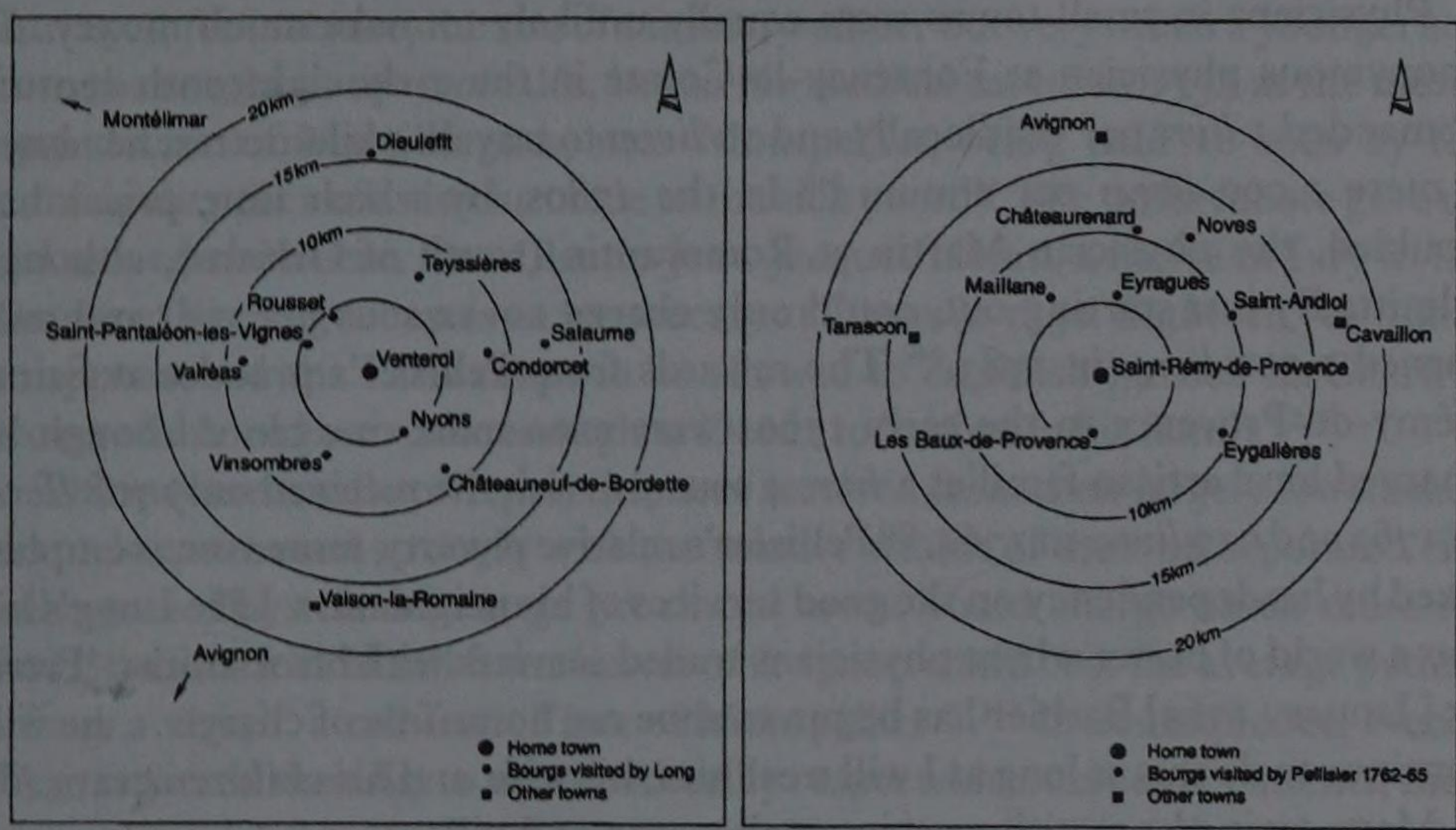
[again] on the morning of the twenty-second.'[242] On other occasions Pellisier was called away by the authorities to assist at an autopsy in a neighbouring *bourg*, as happened in February 1764 when he stayed overnight at Châteaurenard, near Avignon.[243] On the other hand, he seldom had to prepare a written consultation, for there is only one reference to this effect in the three years covered by his *cahier*: 'On 18 [July 1766] I was consulted by a man from Eygalières [another nearby village] through his daughter, and I wrote [a reply].'[244]

Pellisier was evidently a hard-working doctor, but his small-town practice offered little opportunity for a socially elevated clientele. His practice did include the local rural nobility and urban notables (like Milit and Perriat), but most of his patients seem to have come from the poorer sections of the urban community. In one month (May 1762) he visited a merchant's son, a midwife's daughter, a gardener's child, a tailor's son, a shepherd's *métairie*, and so on.

Understandably, but significantly, the parameters of Pellisier's practice were little different from those of the surgeons-cum-general practitioners who inhabited the urban villages of eighteenth-century France, where there was still no physician. In 1790 the Provençal village of Venterol abreast the Nyons-to-Valréas road had a population of 1,363 and two surgeons. One of these was Jacques Long (1732–1810), who had gained his master's letters from Romans in Dauphiné in 1772. According to his extant account book for the years 1774 to 1781, his practice was much the same as Pellisier's. Serving an area of similar geographical extent—he never travelled more than 10 to 15 kilometres (see Map 8*c*)—he, too, had no more than twenty-five patients a month, while on occasion his whole time could be taken up by one: in June 1775 he was entirely occupied with the fractured wrist of the mother-in-law of a local nobleman, Monnier du Petit Marais, who lived in the village of Saint-Pantaléon. Equally, his patients were extremely socially diverse, ranging from nobles to tailors, weavers, shoemakers, and rich (presumably) peasants.[245]

The significant place of the poor in the clientele of physicians and surgeons outside the bigger towns was inevitably not conducive to building a financially successful practice. Village surgeons were unsurprisingly poorly rewarded. We have no way of telling how much Jacques Long earned per year, but he must have been fortunate if he cleared 1,000 *livres*. His standard call-out fee was 1 *livre* per visit, or 2 if he were required to leave Venterol. On top of this he charged separately for supplying drugs or performing minor operations: a phlebotomy cost 15 sous. However, it was only on the few occasions when he was called upon to travel a long distance and perform a complex surgical operation that families ran

[242] BM Avignon MS 5178, fo. 17r. [243] Ibid., fo. 28v. [244] Ibid., fo. 34r.
[245] J. Demesy-Maurent, 'Un maître chirurgien dans la haute Provence drômoise à la veille de la Révolution', *Cahiers d'Histoire*, 33 (1988), esp. 53–6.



MAP 8*c*. The geographical parameters of the medical practice of two Provençal practitioners in the second half of the eighteenth century

(i) *Jacques Long* (surgeon): period 1774–1781

NB: There was a physician at both Nyons and Valréas

Source: J. Demesy-Maurent, 'Un maître chirurgien dans la haute Provence drômoise à la veille de la Révolution', *Cahiers d'histoire*, 33 (1988).

(ii) *Pellisier* (physician): period 1762–1765

Source: BM Avignon MS 5178: account book.

up a large bill; he charged 42 *livres*, for instance, for going to Dieulefit to deliver a dead child. This being the case, Long was scarcely going to become a rich practitioner with never more than twenty-five clients per month, all the more since many patients paid in kind or failed to pay at all. In 1778 another nobleman, Étienne Delaye, had not paid his surgeon for twenty years and Long was forced, presumably in desperation, to send him a bill for 130 *livres* to cover the drugs he had received in the interim, together with a polite note requesting a further 24 *livres* to cover the cost of the surgeon's many visits.[246] But Long may have been better rewarded than many rural surgeons. Thomas Hérier, who practised from 1777–1809 in the village of Saint-Christophe-de-Chalais (600 inhabitants), 46 kilometres south of Angoulême, charged 1 *livre* 10 sous per visit at the end of the Ancien Régime, but had far fewer clients than his Provençal colleague and earned on average over this time only 263 *livres*.[247]

[246] Ibid., esp. 56.

[247] See Lemay, 'Thomas Hérier', 527–8. Over thirty years he looked after 300 families in a 10 km radius. These comprised 36.4 per cent artisans and 51 per cent farmers or farmworkers.

Physicians in small towns were equally unlikely to make much money. An anonymous physician at Fontenay-le-Comte in the early eighteenth century demanded 1 *livre* per visit locally and 10 *livres* to travel 15 kilometres; he netted a mere 1,000 *livres* per annum.[248] In the 1780s, by which time prices had doubled, the physician Martin at Romorantin (south of Orléans), although admittedly just starting out, could only charge 10–12 sous per visit and only earned 1,700 *livres* in 1783.[249] The rewards from Pellisier's practice at Saint-Rémy-de-Provence in the early 1760s were even more meagre. Although he charged local artisan families 1 *livre* 4 sous per visit, he received only 708 *livres* in 1763 and 910 *livres* in 1764.[250] Pellisier's relative poverty, moreover, is emphasized by his dependency on the good services of his neighbours. Like Long's his was a world of barter where physicians traded services with blacksmiths: 'From 15 [January 1765] Barbier has begun to shoe my horse free of charge ... he will continue to do this as long as I will treat him, his wife, and his children gratis.'[251]

Many trained practitioners in small towns and villages must have been no better off than rich artisans, and in some cases in a more parlous condition. Even an average artisan could expect to gain 300–400 *livres* by the end of the Ancien Régime. Bordeu's father, a physician at Pau in the mid-eighteenth century (population 8,500), had great difficulty supporting his son's medical education at Montpellier and Paris in the 1740s.[252] Many medical practitioners in smaller towns, especially physicians keen to maintain their dignity, would have had difficulty even feeding and clothing their families in the appropriate manner. Not surprisingly, such practitioners snatched at any means of increasing their salary. The resourceful moonlighted: at Bayeux in the final decades of the Ancien Régime one surgeon was a brigadier in the local *maréchaussée* (mounted police force); another's wife opened a café and sold alcohol.[253] The fortunate gained institutional medical employment as hospital doctors, local *médecins du roi*, or sometimes as stipended municipal physicians and surgeons, posts that seem to have been common in small-town France in the early eighteenth century, but quickly began to disappear thereafter as their original *raison d'être*—to organize defence against the plague—no longer pertained. François Boissier de

[248] F. Lebrun, *Se soigner autrefois: Médecins, saints et sorciers aux XVIIe et XVIIIe siècles* (Paris, 1983), 88–9.

[249] R. Rouault de la Vigne, 'Une correspondance d'étudiants à la fin du XVIIIe siècle: Les Études et l'installation d'un médecin', *Revue des Sociétés Savantes de Haute Normandie*, 31 (1963), 48 and 52.

[250] BM Avignon MS 5178, totals based on the addition of the separate payments recorded under each visit. Patients were charged a little more for calls in the early hours: a visit to the wife of a glove-maker on 9 Oct. 1762 cost 1 *livre* 16 sous (fo. 8^v).

[251] Ibid., fo. 41^r.

[252] Bordeu, *Correspondance*, i, *passim*; Bordeu continually complained of his desperate poverty; e.g. letter to his father from Paris, 16 Jan. 1747 (ibid. i. 148).

[253] O. Hufton, *Bayeux in the Eighteenth Century: A Social Study* (Oxford, 1967), 70.

Sauvages, for instance, the son of a military officer but very much a younger son from the southern town of Alès, began his medical career in 1734 as the municipal doctor of Marsillargues, near Montpellier, being paid 10 sous by the municipality for each visit he made to the sick poor.[254] The unfortunate gave up and moved elsewhere. One Claude-Jean-Jacques Haran, a native of Ivry in the diocese of Evreux, set up as an apothecary at Dreux in 1750. Eighteen years later he approached the Paris corps to be allowed to establish himself in Chartres because he could not make enough at Dreux to 'maintain his family'.[255]

The income small-town practitioners received from their largely lower-class clientele contrasted strongly with the relative wealth of their incorporated city colleagues. Physicians in large provincial towns could charge much more for their services: a local call from Calvet of Avignon could cost the average patient 2 *livres* a visit,[256] a call from Fizes of Montpellier 6.[257] In consequence, even if they restricted their list to a professionally respectable number of patients, their annual income from private practice could be impressive. Calvet (in his day probably the most famous practitioner in Provence) was making 4,000 *livres* per annum from his patients in the 1760s and early 1770s; in the last fifteen years of the Ancien Régime he netted 5,000 *livres* per annum.[258] As a result, he was able to build up an impressive collection of books, fossils, and Roman antiquities, which on his death were given to the city to establish a museum. He left an estate in 1810 valued at 200,000 francs.[259]

Paris physicians, understandably, could do even better. Astruc considered 2 *livres* per visit an insult. When in 1744 he was sent 3 louis (72 *livres*) for the thirty-five visits he had made to the dying Madame de Mauperché, he returned the money expressing his disgust and demanded 100 *livres* minimum.[260] Bordeu

[254] BM Nîmes MS 414, fo. 45, letter to Baux, n.d., [1734]. Part of the deal was that Boissier de Sauvages would be paid a 100 *livre* p.a. retainer by a local noble, M. de Calvisson. He also hoped to be retained at 100 *livres* p.a. by the municipality of Saint-Laurent-d'Aigouze (3 km. away). The demise of the municipal doctor is discussed below, Ch. 12, Sect. B.

[255] BN MS Fr. 14821, fos. 14r–15r.

[256] e.g. BM Avignon MS 3051, fo. 124, itemized bill for the medical care of the noble De Ribiers family, 13 Jan. 1787: Calvet charged the heirs of Joseph de Ribiers 600 *livres* for 300 visits in 1782–3.

[257] Smollett, *Travels through France and Italy*, 93. Fizes was given 24 *livres* for a written consultation by Smollett: ibid.

[258] BM Avignon MS 5622, 'Livre de compte d'Esprit Calvet 1764 à 1808', esp. fo. 64, 'Revenu à ma profession'.

[259] C. F. H. Barjaval, 'Une grande figure avignonnaise: Esprit Calvet', *Astrade: Revue bilingue de Provence*, 7 (1970), 131–7. The collection became the present Musée Calvet, Avignon. Part of his collection was destroyed in the Revolution. Most of Calvet's vast correspondence concerns his extra-professional interests: e.g. his correspondence with the Nîmes *érudit* Jean-François Séguier (1703–84), 1760–83, conserved in BM Nîmes MS 140.

[260] AM Reims Collection Tarbé XVII, no. 16: Astruc to Boullenois, substitute to the *procureur-général* of the Paris Parlement, the family's intermediary.

may have been poverty-stricken as a medical student, but he quickly built up a lucrative practice once he gained his Paris doctorate in 1754. When the marquis de Poudenas died in Bordeu's arms *en route* to Barèges in the following year, he was already owing his physician-escort 1,000 *livres* for the care he had thus far received. Admittedly, when Bordeu died in 1776 his relatives received nothing but this reflected an unwise investment decision on his part shortly before his demise. He had placed 80,000 *livres* in non-inheritable life annuities (*rentes viagères*).[261]

In general surgeons and apothecaries in big cities would have been equally comfortably off, especially surgeons who extended their practice to include male midwifery. Thus, the Reims surgeon Pierre Robin was receiving 4,000 *livres* per annum from his practice as an accoucheur on the eve of the Revolution.[262] And Robin was not the richest surgeon in Reims. According to the *capitation* records for 1787, he was included in the 21-*denier* (or -penny) band, while his colleague Jean-Baptiste Caqué (who died in the same year), surgeon at the Hôtel-Dieu, was assessed at 40 *deniers*.[263] Robin was also not as rich as the widow of the apothecary Gourdin, assessed at 24 *deniers*,[264] and only a little wealthier than two other apothecaries, included in the 20-*denier* band. Admittedly, most surgeons and apothecaries in Reims were less well-to-do than Robin and his colleagues, but only two out of the seventeen could be classed as poor, assessed at the same level as artisans (see Fig. 8*a*).[265]

Moreover, physicians, surgeons, and apothecaries in big towns had other means, not open to their rural and small-town colleagues, of increasing their

[261] Bordeu, *Correspondance*, ii. 222–6, editorial account of the Poudenas case (see above, Sect. D); and iii. 243–7, Bordeu's brother's account of the family's wealth; at this date another brother, François, was physician to the army hospital at Barèges, and with his income as a private spa doctor, was earning 4,000 *livres* p.a.—hence the attraction of the post, which carried a salary of 1,200 *livres* p.a. and was acquired for Bordeu père through the court contacts of his son in 1754: see ibid. ii. 125 ff. (series of letters from Théophile to his father, beginning 29 Mar. 1754).

[262] BM Reims MS 1082, account book 1770–97. The development of male midwifery and the parameters of Robin's practice will be discussed below, Ch. 9, Sect. E. Robin charged a differential rate for his services according to the social status of the mother: artisans usually paid 3 to 6 *livres*, but a patient of means could be charged as much as 120 *livres*.

[263] AM Reims R *fonds ancien* 680–1, *capitation* register 1787. The way in which the *capitation* was assessed differed over time. Unfortunately, the 1787 register cannot be used in the same way as its 1701 predecessor (see above, Ch. 5, Sect. D), to compare the relative economic position of the three branches of the medical community, because the physicians were assessed separately on the second estate role; they all paid at the 31 *denier* rate. The most highly assessed member of the third estate was a *négociant* (large wholesale merchant) rated at 210 *deniers*. Most artisans were included in the 2 to 4 *deniers* band.

[264] Presumably the widow of Claude-François Gourdin (d. 1784): see BM Reims MS 1084, no. 3, apothecaries' matriculation register.

[265] Caqué had been the richest surgeon in 1776 but Robin, at that date just beginning his midwifery business, was less well placed: see AM Reims R *fonds ancien* 666, *capitation* register 1776.

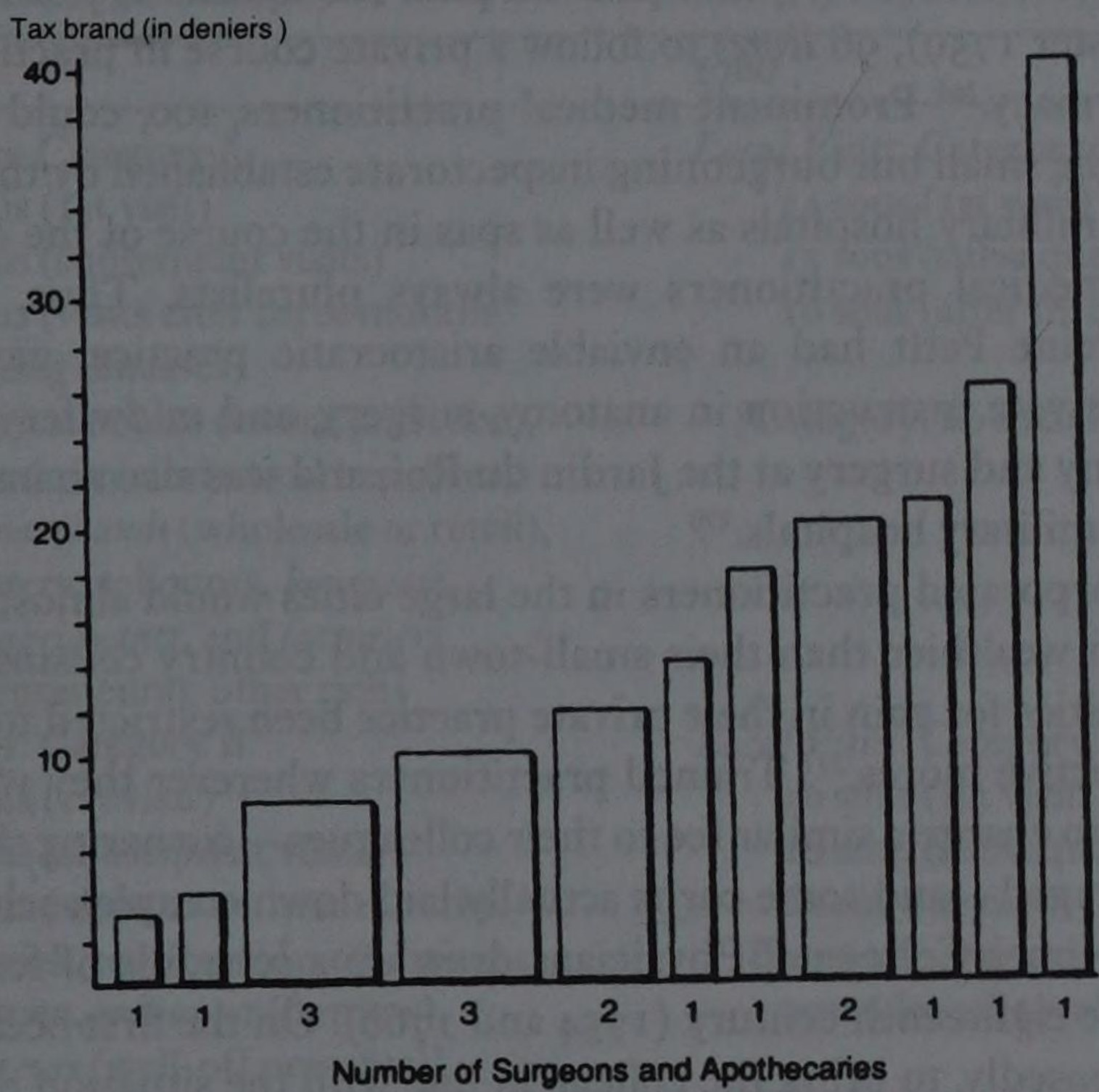


FIGURE 8*a*. The relative wealth of surgeons and apothecaries in Reims, 1787
Source: *Capitation* tax, 1787: AM Reims R *fonds ancien* 680–1.

income. Not only could they, too, become hospital doctors (and at a larger stipend)[266] but they could also look to be appointed as accredited medical practitioners to local regular convents and college *pensionnats*. The Paris surgeon Raphaël-Bienvenu Sabatier, for instance, acted as surgeon to the boarders at the Collège de Mazarin, one of the ten *collèges de plein exercice* in the capital. In 1759 he was paid 97 *livres* 10 sous for his services for the previous five years, while in 1765 he received 521 *livres* for the previous three.[267] In Paris and provincial towns with a faculty or academy, especially Montpellier, there was also the opportunity to give public or private lectures and demonstrations to the increasing number of medical students and interested laymen. Parisian lecturers especially knew how to charge: in 1769 Guillaume-François Laënnec paid Sabatier 72 *livres* to attend his private anatomy course, plus a further 24 *livres* to learn the

[266] See below, Table 11*c*: a list of hospital salaries.

[267] AN H³ 2834, college accounts 1758–65, *sub annis* (1759, p. 24; 1765, p. 22). Towards the end of the Ancien Régime, colleges were paying medical men retainers: thus the Bourges Collège de plein exercice in 1788 decided to employ a physician and surgeon at the annual stipend of 4 *livres* and 2 *livres* per boarder respectively: see AD Cher D 39, fo. 5ᵛ, college minute-book. There were 100 *collèges de plein exercice* in France before the Revolution, plus many other private boarding-schools in large towns teaching mathematics, bookkeeping, etc.: see Brockliss, *Higher Education*, ch. 1.

technique of dissection; two years later he paid the apothecary Mitouart (or Mitouard, master 1759), 96 *livres* to follow a private course in practical chemistry and pharmacy.[268] Prominent medical practitioners, too, could expect to gain a post in the small but burgeoning inspectorate established by the state for both civil and military hospitals as well as spas in the course of the century.[269] High-profile medical practitioners were always pluralists. Thus, the Paris physician Antoine Petit had an enviable aristocratic practice, gave much-sought-after private instruction in anatomy, surgery, and midwifery, held the chair in anatomy and surgery at the Jardin du Roi, and was also an inspector of the kingdom's military hospitals.[270]

Indeed, incorporated practitioners in the large cities would almost certainly have been even wealthier than their small-town and country cousins, had not their opportunities for gain in their private practice been restricted to a certain degree by collective mores.[271] Trained practitioners wherever they were based were expected to charge a similar fee to their colleagues—cornering the market was not encouraged—and some corps actually laid down complex schedules of charges. The Nîmes College of Physicians drew up a schedule of fees on two occasions in the eighteenth century (1754 and 1760). On the first occasion this was done, supposedly, to bring the college in line with the situation elsewhere, the regulation of *honoraires* being 'a custom so universally recognized in the different towns of the kingdoms that it has the force of law, both for practising physicians and the sick'.[272] On the second occasion, the composition of the schedule was demanded by the physician Jean Razoux (1723–98), in order to ensure the livelihood of the Nîmois physicians in a period of commodity inflation, although bizarrely the fees in this second schedule were lower than those in the first.[273] What is striking about the two schedules is not just the detail (every possible form of medical service was itemized), but also the modest level at which fees were set, even for the well-to-do (see Table 8*g*). On neither occasion

[268] See Rouxeau, *Étudiant en médecine*, 37 and 68–9. Sabatier in addition charged 15 *livres* for each corpse to practise on. For the development of private medical teaching, see above, Sect. C.

[269] Admittedly, many of the posts were *ad hoc*, *ad hominem*, or purely honorific. The size of the official military inspectorate actually went down over the century: see Table 11*b*. The king's premier physician, in his capacity as *surintendant des eaux-minérales*, had the power to establish spa intendants from 1605: information revealed in BFMP MS 2006, fos. 312–13, royal letters patent establishing Claude-Jean-Baptiste Dodart (1664–1730) as *surintendant*, 7 Sept. 1718. We have not seen the original 1605 decree. For the duties of these officials, see L. W. B. Brockliss, 'The Development of the Spa in Seventeenth-Century France', in R. S. Porter (ed.), *The Medical History of Waters and Spas* (*Medical History*, suppl. 10; London, 1990), 34–5.

[270] Calvet of Avignon also had an additional income as a faculty professor and hospital doctor.

[271] Eighteenth-cent. French practitioners charged less than their unregulated English contemporaries. For the cost of visits in England, see the figures in I. Loudon, *Medical Care and the General Practitioner 1750–1850* (Oxford, 1986), 65–72, 81–5, and ch. 5.

[272] BM Nîmes MS 414, fos. 87^{v}–88^{r}. [273] Ibid., fo. 94^{r}.

TABLE 8g. *Charges laid down by the Nîmes Corporation of Physicians, 1754 and 1760*

1754	1760
Local Visits: Category A 40 sous (1st visit) 30 sous (subsequent visits) 20 sous (visits after three months in long illnesses) [Categories: nobles (sword and robe), holders of ecclesiastical benefices, *bons marchands* (wholesale or retail), barristers, solicitors, *bourgeois*, *bons fabriquants*, and *facturiers* (entrepreneurs); other rich]	*Local Visits*: Category A 24 sous (1st visit) 15 sous (subsequent visits) 10 sous (after three months) [Category: no social ranks specified]
Local Visits: Category B 30 sous (1st visit) 20 sous (subsequent visits) 15 sous (visits over three months) [Categories: comfortably-off artisans, workmen, *ménagers* (farmers), *laboureurs* (well-off peasants)]	*Local Visits*: Category B 16 sous (1st visit) 10 sous (subsequent visits) 6 sous 8 *deniers* (3 months +) [Category: artisans, *laboureurs*, *travailleurs de terre* (farm-labourers)]
Visits to indigent not on charity: no charge [to be served as assiduously as if paying] NB The same rates apply if a physician attends a dressing performed by a surgeon	*Visits to indigent not on charity*: no charge
Visits to faubourgs: extra 10 sous per visit, added to the standard charge levied according to social rank	*Visits to faubougs*: no extra charge
Night Visits (if physicians forced to get up): 6 *livres*	*Night visits*: 3 *livres*
Consultations with colleagues: 6 *livres* per doctor present [same rate for consulting with surgeons]	
Consultations by letter: 9 *livres*	*Verbal consultations* (i.e. talking to a patient's intermediary): 4 *livres* 4 sous *Written consultations*: 6 *livres*
Visits out of town (i) Up to a league and a half (6 to 7 hrs): 9 *livres* + expenses (ii) 3 leagues: 12 *livres* (iii) Visits requiring a day's absence: 24 *livres* (iv) per diem rate for staying out of town: 24 *livres* + expenses	*Visits out of town* (i) per diem rate if not stay overnight: 10 *livres* + expenses (ii) per diem rate if stay overnight: 20 *livres* + expenses

Source: BM Nîmes MS 425, corporation minute-book, fos. 88r–89r, 94r.

were the richest inhabitants of Nîmes expected to pay more than 2 *livres* per visit or 6 *livres* at night, while a visit out of town that took all day was rated at 10 to 24 *livres*. Even if the charges were never closely adhered to, the sentiments of the corporation were clear: the physicians of Nîmes were not supposed to be abusing their market position.

In consequence, as in the sixteenth and seventeenth centuries, the avenue to really significant wealth as a medical practitioner in the eighteenth century lay through the court. Moreover, opportunities were greater than ever before, for the court medical establishment expanded exponentially in the course of the eighteenth century: in 1720 there were only 17 physicians attached to the royal household; in 1789 there were 88, plus 96 surgeons.[274] The value of having a court position came not usually from the office itself (which had to be bought in most instances) but from the fringe benefits. While the king's premier physician received 34,000 *livres* per annum towards the end of the Ancien Régime, most court medical posts were not nearly so lucrative. Still, they were worth the heavy investment for the status they gave the holder and the possibility of building up an aristocratic practice.[275] The future revolutionary journalist Jean-Paul Marat (1744–93), for instance, received only 2,000 *livres* per annum as doctor in the household of Louis XVI's brother Artois, but his position allowed him to charge his private patients 36 *livres* per visit.[276] Successful court doctors could thus become very wealthy. When the king's physician Pierre-Jean-Baptiste Chomel died in 1740 he left a fortune worth 160,000 *livres*, chiefly comprised of property (80,000 *livres*), annuities (45,000 *livres*), and his medical office (20,000 *livres*), twice the amount Bordeu had acquired by 1776. Chomel, of course, was in an advantageous position in that his father had been a royal physician, too.[277] But even those who entered the hallowed circle from relatively humble beginnings could become extremely rich. Thus the Paris physician Antoine Portal (1742–1832), who combined practice at court and in the city with a successful teaching career (he taught anatomy privately) enjoyed an annual income in the 1780s of 30,000 to 40,000 *livres*.[278]

[274] C. Jones, 'The *Médecins du Roi* at the End of the *Ancien Régime* and in the French Revolution', in V. Nutton (ed.), *Medicine at the Courts of Europe, 1500–1837* (London, 1990), esp. figures on pp. 213–14 and 226.

[275] There was always the chance, too, of receiving lucrative gifts. When Tronchin inoculated the children of the duc d'Orléans in 1756 he received 50,000 *livres*, plus gold boxes and jewellery: see Tronchin, *Théodore Tronchin*, 120.

[276] Jacques-Pierre Brissot, *Mémoires*, ed. F. de Montrol (4 vols.; Paris, 1830), i. 337; general comments in Jones, '*Médecins du roi*', 221–5.

[277] D. Sturdy, 'Pierre-Jean-Baptiste Chomel (1671–1740): A Case Study in Problems Relating to the Social Status of Scientists in the Early Modern Period', *British Journal for the History of Science*, 19/3 (1986), 313–19.

[278] In 1788 he earned 43,000 *livres*: E. H. Ackerknecht, *Medicine at the Paris Hospital, 1794–1848* (Baltimore, 1967), 115. In 1785 he apparently earned 31,226 *livres*: see P. Huard and

Court practice was also the key to real social advancement, for a number of royal physicians and surgeons not only received additional pensions for their services but the ultimate accolade: nobility. The habit was begun, in some ways curiously, by that great lover of order Louis XIV, who ennobled his chief physician, Antoine d'Aquin, in 1669 and two of his chief surgeons, Charles-François Félix de Tassy (understandably, in appreciation of his surgical dexterity) in 1690 and Georges Mareschal (for no obvious reasons) in 1707.[279] Louis XV and Louis XVI continued the trend, as always showing less discretion. Under Louis XV ennoblement of court practitioners became commonplace. Some beneficiaries of royal largesse were admittedly men with a high reputation among their colleagues such as the surgeons La Peyronie and Quesnay.[280] Often, however, nobility was conveyed for relatively trivial services. In February 1738, for instance, the dauphin was suffering from a small abscess on the cheek, accompanied by a slight fever. A small operation was performed and the heir to the throne was perfectly cured. However, in recognition of their sterling contribution to the survival of the dynasty, 'M. Silva, physician [Jean-Baptiste Silva, 1682–1777], has been made a noble, and M. Dumoulin [the surgeon, later physician, Jacques, 1663–1755] given a pension of 6,000 *livres*.'[281] Moreover, practitioners who were not elevated to the nobility by their sovereign could often buy their way in. Dumoulin was one of many members of the third estate who purchased the ennobling office of *secrétaire d'état* in the course of the eighteenth century. Assuming that he paid the going rate of 120,000 *livres*, he had still put enough money aside by his death in 1755 to be supposedly worth 1.5 million *livres* or 100,000 *livres* per annum in *rentes*.[282]

M. Grmek, *Sciences, médecine, pharmacie de la Révolution à l'Empire, 1789–1815* (Paris, 1970), 284. Portal does not seem to have over-charged: on average he demanded only 6 *livres* per visit. His income was certainly not huge in comparison with, say, François Vautier's in the mid-17th cent., but this would suggest that the figures given in Ch. 5, Sect. D, are inflated.

[279] According to Jacques-Albert Hazon, *Notices des hommes les plus célèbres de la faculté de médecine 1110–1750* (Paris, 1773), 66–8, the Paris physician Michel Marescot (d. 1605) was elevated to the nobility as early as 1595, but he seems to have received the honour for his services as a spy. According to Saint-Simon's *Mémoires* Mareschal was a powerful figure at Louis XIV's court but his elevation suggests he was less dependent on Fagon than the duke implies: see L. W. B. Brockliss, 'The Literary Image of the Médecins du Roi in the Literature of the Grand Siècle', in Nutton (ed.), *Medicine at the Courts of Europe*, 133–40.

[280] By the time Quesnay was ennobled in the 1750s he had gained a doctorate in medicine, was physician to Mme de Pompadour, and had become associated with economic reform. On the phenomenon generally, see G. Chaussinand-Nogaret, 'Nobles médecins et médecins de cour au XVIIIe siècle', *Annales ESC*, 32 (1977), 851–7.

[281] Edmond-Jean-François Barbier, *Chronique de la Régence et du règne de Louis XV (1718–1763)* (8 vols.; Paris, 1857–8), iii. 123. La Peyronie in 1747 left over 1.5 m. *livres*: see Gelfand, *Professionalizing Modern Medicine*, 62.

[282] Barbier, *Chronique*, iii. 123. For the prominent role of the secretaryship in upward social mobility, see Bien, 'Réaction aristocratique avant 1789', 44–8.

Clearly medical practitioners at court continued to live in a different world from that of their colleagues. They might not have been able to command the income of their top London colleagues—William Hunter (1718–83) in the 1760s had an income equivalent to 250,000 *livres*[283]—but they enjoyed the lifestyle of a grandee, in Portal's case receiving an income which would not have disgraced a *parlementaire* or a court aristocrat.[284] There again, the distance between the world of the court practitioner and the world of his incorporated colleagues was not as great as the gulf between trained practitioners in large towns and the mass of physicians, surgeons, and apothecaries. It was only the distance between luxury and comfort; there was an unbridgeable chasm between comfort and relative penury. Moreover, the number of court practitioners was never more than an insignificant proportion of the community of trained practitioners. As a result, then, of the growing élitism of the more prestigious corporations in a period of expanding numbers, a new and serious division was appearing within the community of trained practitioners. In addition to the existing vertical functional distinction between the three branches of the community and the horizontal status division between the physicians on the one side and the surgeons and apothecaries on the other, a second horizontal division was opening up between the affluent and the more economically vulnerable trained medical practitioner. As was pointed out in Section D, this development could not but have profound consequences for the community's cohesion.

F. A Community in Crisis

Although the structure and size of the corporative medical community changed little in the course of the eighteenth century, this chapter has demonstrated that its authority and coherence had been effectively undermined. In the first place, thanks to the growing élitism of the medical corporations in the large towns, its most prestigious members, in particular the Paris College of Physicians, no longer spoke for the community of trained practitioners as a whole. In the second place, the growing emancipation of the surgeons from the administrative and cultural tutelage of the physicians, although never complete,[285] dealt a

[283] R. S. Porter, 'William Hunter: A Surgeon and a Gentleman', in Bynum and Porter (eds.), *William Hunter*, 11.

[284] For noble incomes, see G. Chaussinand-Nogaret, *La Noblesse au XVIIIe siècle: De la féodalité aux lumières* (Paris, 1976), 77–8.

[285] Physicians did still play a role in the certification of surgeons. According to the 1730 statutes covering provincial surgery, physicians were to be present at some but not all of a candidate's examinations and to attend the final oath-taking ceremony. Some *médecins du roi* claimed the right to preside over surgical corporations and interrogate candidates, but, according to Le Blond d'Olblen, the first right was definitely given to the *chirurgiens jurés du roi* by the 1692 edict, and the second was never admitted in the statutes of the leading surgical corps, which defined the physicians' role more precisely: see *Statuts et règlemens généraux*, 40 (art. lxiv) and 41–2 n.

serious blow to the organic unity of the corporative community, which depended on the maintenance of traditional hierarchical distinctions.

Moreover, the increasing organizational independence of surgery was accompanied by a rise in the surgeon's status. In the sixteenth and seventeenth centuries it was accepted even by surgeons (except the members of the élite Paris corps of Saint-Côme) that surgery was a manual art and that surgeons were skilled artisans. In the course of the eighteenth century, in contrast, surgery gradually came to be legally recognized as a liberal art, just like physic. The first sign that attitudes towards surgery were changing appeared in the 1699 statutes of the Paris corporation, where it was decreed that masters who abandoned barbering and practised 'the art of surgery purely and simply will be considered to practise a liberal art and will enjoy all the privileges attributed to the liberal arts'.[286] By the 1730 Edict of Marly the crown extended this right to all surgeons who forsook the art of barbering, and in 1756 in the Edict of Compiègne the king spelt out what specific privileges such surgeons would now enjoy. Essentially, they were to be given the status of *notables bourgeois*, and their sons and servants freed from service in the municipal watch and the local militia.[287] The abolition of the apprenticeship system in 1772 was merely the icing on the cake. Thereafter, no one could doubt that surgery was a liberal art and that surgeons, as opposed to barber-surgeons, were the physicians' equals, especially in towns, like Paris, where surgeons were forbidden to be barbers and candidates for the mastership had to be men of letters holding an MA.[288]

This development was all the more significant in that the legal status of apothecaries marked time over the eighteenth century. Despite the fact that apothecaries in the big cities were completely separate from spicers and that many were educated in the Latin and Greek humanities and philosophy,[289] no corporation ever succeeded in having its members dubbed *notables bourgeois*. Not surprisingly, the surgeons' success was resented, and the apothecaries felt particularly annoyed that their children and assistants remained subject to military call-up. In the Seven Years War, it would seem that journeymen apothecaries were even conscripted into the standing army, leading the Soissons

[286] *Statuts pour la communauté des maistres chirurgiens jurez de Paris* (Paris, 1701), art. 24; cited in Gelfand, *Professionalizing Modern Medicine*, 36.

[287] *Statuts et règlemens généraux*, 17, art. vii of the Edict of Marly; the edict of Compiègne is given in the same collection, doc. X.

[288] Obviously the Reims College of Physicians deflected this challenge to the hierarchical organization of the corporative medical community by having its members included on the noble *capitation* roll: see above, n. 263. There again, as was said above, Sect. D, no group of physicians ever successfully elevated their status *vis-à-vis* the surgeons by gaining an automatic entitlement to nobility.

[289] A number of apothecaries were important figures in the Republic of Letters, such as the Paris pharmacist Claude-Joseph Geoffroy (1685–1752), who, like his brother, the physician Étienne-François, corresponded frequently with Hans Sloane, secretary to the Royal Society.

corporation in 1766 to attempt to organize a concerted movement of protest against the subjection of pharmaceutical practitioners to any form of military service.[290]

The underlying history of the corporative medical community over the eighteenth century made it highly unlikely that the ambitious medicalization plans of the physician-reformers of the 1770s and 1780s could ever be put into effect. If, on the one hand, the growing number of physicians and surgeons in small towns and villages seemed to open up the possibility of the medicalization of the people, the concomitant growing élitism of the corporations in the large towns made the practical realization of the new vision of the physician as hygienist, child-care adviser, beautician, family doctor, and epidemic troubleshooter well-nigh impossible. In a century when the demands that the affluent were likely to make on the corporative community were growing fast, as the élite expanded in numbers and its interest in health grew, there cannot have been enough physicians and surgeons in the chief cities of France to satisfy the community's traditional role as healer of the sick, let alone to take on additional tasks.[291] Yet, even if the expansion in the number of trained medical practitioners had substantially increased the provision of medical care in the cities, the dreams of the physician-reformers could still not have been easily realized. These dreams, at least until 1789, were posited on the assumption that the traditional medical hierarchy remained intact. The new physician was to be a counsellor more than a practitioner, controlling and organizing a bevy of outworkers, surgeons, apothecaries, and midwives, who would bring medical enlightenment to the rich and poor by following his educated instructions to the letter. Such a vision of medical progress hardly gelled with professional reality. The surgeons, especially in the big cities, were too independent and self-confident to stomach playing the role of the subordinate foot-soldier.

The growing independence of the surgical branch of the corporative community was the more significant of the two developments in the long term. The élitism of the more prestigious corporations could not have been dealt with without state intervention, but a government more willing to police corporative

[290] See BM Reims MS 1088, letter from the Soissons to the Reims (?) corps, 1766—no precise date.

[291] Admittedly, it is a moot point whether the élite on the eve of the Revolution shared the reformers' novel and extended vision of the physicians' role. The affluent might have become steadily more concerned about their health in the course of the century, but this did not necessarily mean that they had absorbed the reformers' propaganda and saw the physician as a permanent presence in their lives as a medical counsellor. The authors are well aware that lay attitudes to the role of the learned physician in the 18th cent. need to be researched much more deeply. In the present work they trace only the growth of a more health-conscious society (above, Ch. 6, esp. Sect. E), point to evidence of lay scepticism about the efficacy and rights of learned medicine (above, Ch. 7, Sect. F, and Conclusion, Sect. B), and explore the development of a much more extended field of medical services outside the graduate physicians' control (below, Ch. 10).

institutions more closely could quickly have opened up medical practice in the large towns. The breakdown in the traditional hierarchical relations between the three branches of the community, however, was more difficult to remedy, as its cause was cultural rather than structural. Admittedly, this would not seem to be the case from what has been said. The growing independence and rising status of surgery have been presented as legislative acts, a series of royal pronouncements whose substantive content reflected the personal agenda and peculiar influence of a series of premier surgeons, notably Mareschal and La Peyronie. But this is to exaggerate the significance of court politics in deciding the direction of institutional development in eighteenth-century France. In fact, Mareschal and his successors were able to receive royal approval for the establishment of independent schools of surgery, the standardization of the process of becoming a master, the emergence of an élite of classically trained and philosophically educated city surgeons, and the *embourgeoisement* of surgery as an occupation, not because of their courtier skills but because of wider scientific and cultural developments.

The eighteenth century, especially in France, was a particularly fecund period for the development of surgery as an art. From 1700 Paris became the centre of European surgery, its masters acknowledged as technical pioneers in an art which was once more developing after a century that had seen little progress. It was in an atmosphere of growing surgical confidence that the organizational agenda of the premier surgeons of the king was born. However, it was in the wider cultural context of the Enlightenment that the agenda was sustained. In the Age of the Enlightenment medicine as a practical science may have gained a novel legitimacy. But within the science of medicine, it was the art of surgery, primarily because of its practical advances in the early part of the century, which seemed to the *philosophes*, especially the editors of the *Encyclopédie*, the most significant discipline. The art of physic in comparison seemed highly uncertain and built on a convoluted theoretical base (at least until 1760). The Enlightenment, then, helped to create a contemporary perception of surgery as the useful medical art, while leading, usually Parisian, surgeons themselves quickly appropriated the language of the Enlightenment to justify enhancing their dignity. Influence at court and patronage evidently played a part in securing statutory recognition of surgery's independence, as was inevitable in an Ancien Régime state, but the primary force for change was cultural.[292]

[292] There seems no doubt that La Peyronie, who arrived at court in 1719 through his association with the regent's physician, Pierre Chirac, had an agenda for the emancipation of surgery. Nor is there any doubt that as a royal and eventually premier surgeon from 1719 to 1747, he had unprecedented influence over the king: see Gelfand, *Professionalizing Modern Medicine*, 59–61; Barbier, *Chronique*, iii. 447, on the comparative political skills of La Peyronie and Louis XV's premier physician, 1732–52, François Chicoyneau.

For this reason, it is essential to study the rise in surgery more closely. So far in the present chapter, we have only examined its institutional consequences. In Chapter 9 we look at the progress of the art and the ideological debate between surgeons and physicians that its institutional emancipation gave birth to. It is only once we understand how comprehensively the physicians were defeated in the appeal to public opinion, and how far the physicians themselves had actually accepted much of the surgeons' case in the second half of the eighteenth century, that we can properly understand why the organizational status quo was no longer an option in 1789. The physician-reformers may have largely wanted to maintain the traditional functional divisions and hierarchical structure but this was no longer culturally possible.[293]

[293] For the eventual reorganization of medical practice in 1803 in a manner that took account of the developments of the 18th cent., see below, Conclusion, Sect. D.

9

The Rise of Surgery

A. French Surgery in the Eighteenth Century

In the sixteenth and early seventeenth centuries a number of French surgeons had made significant contributions to the surgical art.[1] In contrast, for most of the seventeenth century French surgery lay in the doldrums. If surgical knowledge and expertise may not have declined, as eighteenth-century commentators were to maintain, there can be no doubt that after 1620 there were no longer French surgeons with the flair and originality of an Ambroise Paré. Félix de Tassy may have successfully resolved Louis XIV's anal fistula in 1686, but it is significant that he had to learn how to do the operation first.[2] At the turn of the eighteenth century, however, French surgery entered a new era of fecundity. By the 1720s a group of Paris surgeons, headed by Jean-Louis Petit (1674–1750), Henri-François Ledran and Sauveur-François Morand (1697–1773) had gained an international reputation for their anatomical skill and surgical innovativeness. Theirs was no generational flash-in-the-pan. Thanks to their development over the course of the century of novel forms of instruction in the guise of the private amphitheatre and the hospital-course, the traditional limitations of the apprentice-system were effectively bypassed.[3] By offering a relatively large number of fee-paying pupils hands-on tuition and experience, Petit and his colleagues were able to train a second generation of French surgeons, such as Antoine Louis and Jacques Tenon, who continued the innovative work of their masters and in turn passed the torch of surgical progress to their own pupils.[4] As a result, Paris became a surgical Mecca to which the keenest surgeons and

[1] See above, Ch. 2, Sect. B.

[2] French surgeons writing the history of their art in the mid-18th cent. possibly exaggerated the decline of French surgery in order to highlight the achievements of their own age; e.g. François Quesnay, *Recherches critiques et historiques sur l'origine, sur les divers états et sur le progrès de la chirurgie en France* (Paris, 1744), pt. v, *passim*. It should be noted that Voltaire in his *The Age of Louis XIV*, Eng. trans. (London, 1961), 301, 374–5, claims that French surgery in the reign made greater progress than elsewhere, but he gives no exx.

[3] For private tuition in anatomy and surgery, see above, Ch. 8, Sect. C. Petit opened his amphitheatre in 1700.

[4] Before the Revolution, the private courses were always more important in this regard than the École de Chirurgie which did not provide hands-on experience except in the *école pratique de dissection* founded in 1751: see above, Ch. 8, Sect. C.

physicians flocked for training from all over Europe.[5] Arguably, Paris remained the centre of European surgery until the mid-nineteenth century, though it began to be rivalled in the second half of the eighteenth century by London, where surgeons like William Hunter, himself a Paris trainee, opened their own highly successful private amphitheatres or hospital-based schools.[6]

Admittedly, as in the sixteenth and early seventeenth centuries, the renaissance in French surgery of the eighteenth century was the work of a small élite, even among the Paris surgeons. But the number of surgeons caught up in the movement and the scale of their achievement was incomparably greater. It is no exaggeration to talk of a surgical revolution in the period, for virtually every aspect of the art was altered over the course of the century. Significantly, in contrast to the age of Paré, this was not just a Paris-based movement, but quickly embraced surgeons in the leading provincial cities. Indeed, some of the most innovative developments occurred in the provinces, even if their inventors were eventually lured to the capital and the court. Thus the most important eighteenth-century development in ophthalmology was the work of a Marseilles surgeon, Jacques Daviel (1693–1762), whose novel treatment of cataract will be discussed below. Furthermore, again in contrast to the sixteenth century where Paré's readiness to reveal his operative secrets was uncommon, eighteenth-century surgical innovations did not remain the property of their inventor or his apprentices. Most eighteenth-century surgeons were children of the Enlightenment who believed in the necessity of popularization.[7] Not only did the great surgeons pass on their skill to paying private pupils, but they quickly revealed their discoveries to the wider intellectual élite of the Parisian and provincial academies, who promoted the surgical innovations in their memoirs.[8] The surgeons, too, frequently attempted to reveal their discoveries to as wide an audi-

[5] For an account of opportunities in the 1720s, see *Johannes Gessners Pariser Tagebuch 1727*, ed. U. Boschung (Berne, 1985), esp. 69–181, editorial survey of the activities of Ledran and his colleagues. Morand purportedly had 70 + *pensionnaires* from different parts of Europe in the period 1726–46 staying in his own house or an annexe: see his obituary notice in *Catalogue des livres de la bibliothèque de feu M. Morand* (Paris, 1774), 12.

[6] For Hunter's activities, see W. Bynum and R. S. Porter (eds.), *William Hunter and the Eighteenth-Century Medical World* (Cambridge, 1985), ch. 1. For the general development of London as a centre of anatomy and surgery, see S. C. Lawrence, 'Science and Medicine at the London Hospitals: The Development of Teaching and Research, 1750–1815', Ph.D. diss., Toronto, 1985; also ead., 'Educating the Senses: Students, Teachers and Medical Rhetoric in Eighteenth-Century London', in W. Bynum and R. S. Porter (eds.), *Medicine and the Five Senses* (Cambridge, 1993), and T. Gelfand, ' "Invite the Philosopher as well as the Charitable": Hospital Teaching as Private Enterprise in Hunterian London', in Bynum and Porter (eds.), *William Hunter*.

[7] There were some exceptions. The provincial surgeon Jacques Daran (1701–84) never made public the secret of his highly successful gonorrhoea cure: see below, Sect. E.

[8] From the 1730s the surgeons had their own academy: see below, Sect. D.

ence as possible by publishing vernacular accounts of their techniques for the benefit of fellow surgeons unable to visit the master. The eighteenth, not the sixteenth, century was the first great age of surgical publication in France, as the market was flooded with a host of specialist works on different surgical operations. Many dealt with areas of the art for which there was no printed literature at all before the eighteenth century, such as dentistry, a specialism which attracted at least nine Paris publications in the thirty years following the appearance of *Le Chirurgien dentiste* of Pierre Fauchard (1678–1761) in 1728.[9]

The history of French surgery in the eighteenth century has still to be written for it remains the case that its achievements have been much praised but never analysed.[10] At the inevitable cost of simplification, it can be suggested that the fundamental development in French surgery in the period before the Revolution lay in consolidating the gains of the past, rather than in promoting novel forms of surgical intervention, although this is in no way to devalue its importance.[11] In the first place, operative techniques which had been known to the ancients or invented by hardy individuals in the sixteenth and early seventeenth centuries but had largely remained the secret property of particular surgical dynasties or even empirics became part of the operative repertoire of the leading Parisian and provincial surgeons. More importantly, those techniques were greatly improved and perfected, so that most traditional operations could now be performed relatively quickly and safely. In consequence by 1789 most city surgeons could perform, and expected candidate masters to know, a wide range of invasive operations which would have been beyond the competence of most of their predecessors a century before. Operations, such as bronchotomy or paracentesis, could be described as life-saving in that they offered potential relief to conditions which threatened to kill imminently; others, especially lithotomy, brought respite from excruciating pain; while some, notably the operation for resolving a harelip, offered a means of ending disfiguring and incapacitating

[9] *Le Chirurgien dentiste, ou traité des dents* (2 vols.; Paris, 1728). Fauchard practised conservationist rather than prosthetic dentistry. A good source for studying the expansion in surgical publications is the catalogue of Morand's library. Morand had *c.*375 surgical works, mostly French and mostly from the 18th cent.: see *Catalogue des livres*, nos. 1325–1698.

[10] A short introd. is provided by M.-J. Imbault-Huart, 'Les Chirurgiens et l'esprit chirurgical en France au XVIIIe siècle', *Clio Medica*, 15 (1981), 143–7. See also ead., *L'Ecole pratique de dissection de Paris ou l'influence du concept de médecine pratique et de médecine d'observation dans l'enseignement médico-chirurgical au XVIIIe siècle et au début du XIXe siècle* (Lille, 1975), 1–35. There is also plenty of information in T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980), *passim*, and L. Dulieu, *La Chirurgie à Montpellier de ses origines au début du XIXe siècle* (Avignon, 1975), 181–95.

[11] This was true of both civilian and battlefield surgery: as regards the latter, the real age of innovation came after 1789: see esp. D. M. Vess, *Medical Revolution in France 1789–1796* (Gainesville, Fla., 1975), and P. Huard and M. Grmek, *Sciences, médecine, pharmacie de la Révolution et l'Empire, 1789–1815* (Paris, 1970), 55–75, 199–217.

disabilities. To whatever category an operation belonged, the city surgeons' new-found skill was eminently marketable. In a world where members of the élite seemed less eager to die, more likely to spin out their days in pain, and more sensitive about their appearances, there must have been an ever-growing number of desperate and despairing clients.[12]

The achievements of French eighteenth-century surgery may be particularly illustrated by studying the perfection and popularization of lithotomy, arguably the most-performed major operation over the century.[13] The sixteenth century had seen a major advance from the classical era in the extraction of the stone with the invention of the procedure known in France as the *grand appareil*. Henceforth, bladder stones could be extracted from adult males as well as children by obtaining entry into the neck of the bladder by an incision of the perineum (the region of the body between the anus and the scrotum). However, before the late seventeenth century hardly any surgeon could perform this operation and it remained the preserve of the Colot family and charlatans.[14] A breakthrough came at the turn of the eighteenth century, when the technique of the *grand appareil* was learnt by Georges Mareschal, who became Louis XIV's premier surgeon in 1706. But even at court Mareschal's new-found expertise was not universally trusted, and Saint-Simon's father-in-law, it will be recalled, preferred unwisely to deliver himself to the tender mercies of Frère Jacques.[15] Mareschal, however, was only the first of a number of Paris surgeons in the early eighteenth century to become expert in the operation by endlessly practising on cadavers, and by the 1720s adult males in the capital were being lithotomized for the first time in considerable numbers and with a reasonable degree of safety. Many of the patients were inmates of the Hôtel-Dieu and Charité hospitals and clearly served as guinea-pigs in the name of surgical progress. But even in the crowded and unhygienic atmosphere of the Paris hospitals the survival rate by the 1720s was impressive. In the eight years 1720–7, 812 were lithotomized at the Hôtel-Dieu and the Charité and 557 survived.[16]

[12] A harelip, which could render the victim speechless and cause liquids to pour out through the nose, could end the marriage chances of an eligible young man or lady. By the 1730s French surgeons could attenuate the most horrifying exx. of the condition: see Georges de La Faye (1699–1781), 'Observations sur les becs de lièvre venus de naissance', *Mémoires de l'Académie royale de Chirurgie*, 1 (1743), 605–18. For this publication, see below, Sect. C.

[13] Despite a less spicy diet (supposedly) in the 18th cent. there is no evidence that the incidence of the stone decreased; many young children continued to be affected.

[14] See above, Ch. 2, Sect. B. Celsus had outlined the operation of the *petit appareil*, which was also by incision and extraction through the perineum, but this could only be performed on children.

[15] See above, Ch. 5, Sect. A.

[16] Sauveur-François Morand, *Traité de la taille au haut appareil, où l'on a rassemblé tout ce qu'on a écrit de plus intéressant sur cette opération* (Paris, 1728), 262–3. For Ledran's achievements at the Charité, see his *Traité sur la taille* (Paris, 1730). It was only in the 1720s, when the operation of the *grand appareil* was becoming a commonplace that the Colots made public their secret.

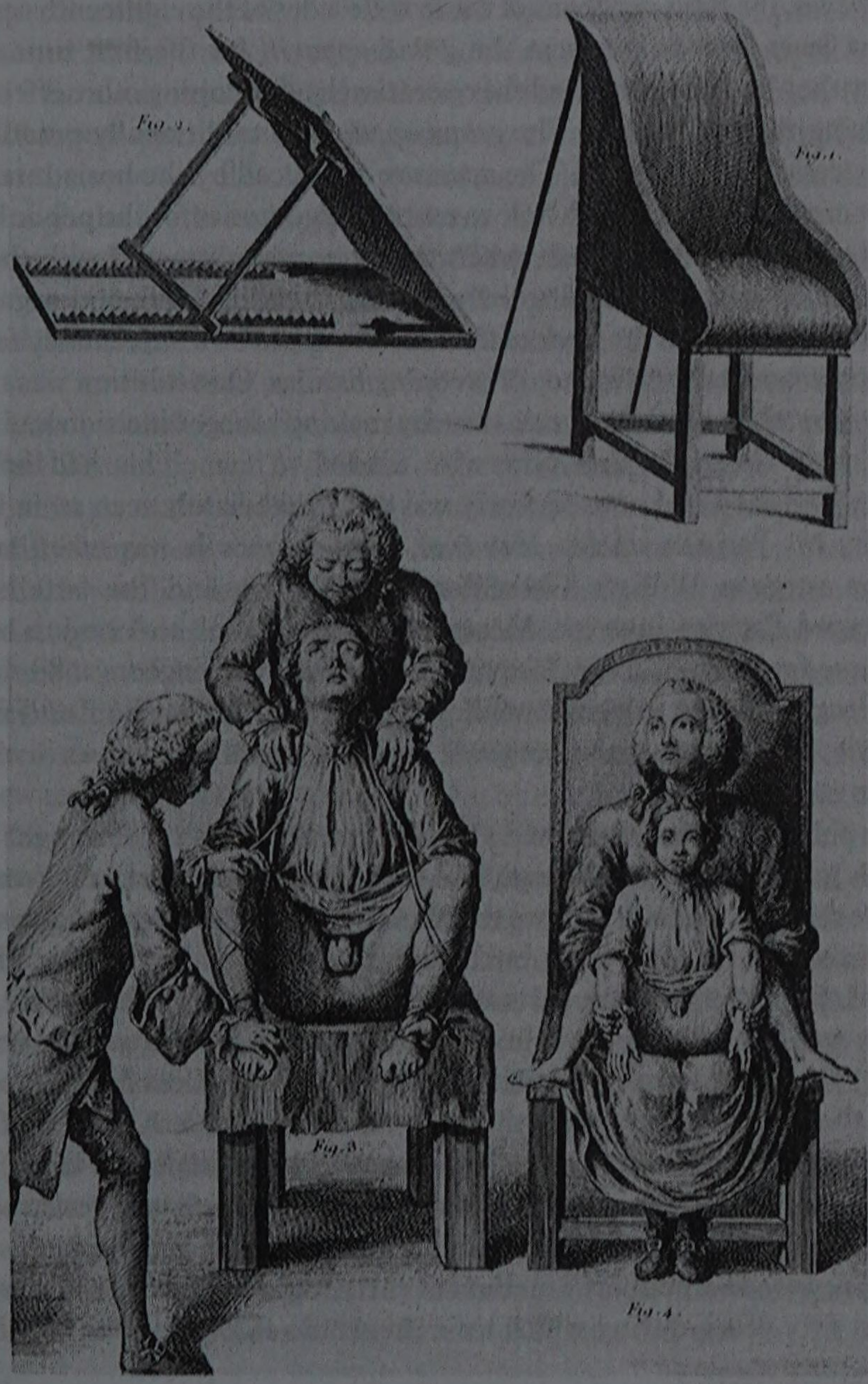


ILLUSTRATION 16. Operating for the stone: various ways of preparing male patients, from D. Diderot (ed.), *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers*; Planches (11 vols., Paris, 1762–72), iii, *Chirurgie*. Planche xii. Lithotomy was one of the most successful major operations performed by the surgical élite in the eighteenth century, thanks to the perfection of the method of incision of the perineum, so as to reduce damage to the prostate and neck of the bladder. Adult patients had to be tied firmly, while the blood was absorbed by a cloth initially placed on the chair.

However, the Paris surgeons of the first decades of the eighteenth century did not just learn how to perform the *grand appareil* for the first time. By mid-century they had also perfected the operation by developing more effective ways of incising the perineum.[17] The *grand appareil* as traditionally practised often had distressing side-effects. The aperture produced by the horizontal incision did not create a large-enough hole to extract large stones for the pelvic bone prevented a wide cut. As a result, when the stone was extracted with the aid of a tongs-like instrument called *tenettes*, the surrounding flesh and organs, especially the prostate and the neck of the bladder, could be irredeemably torn, leading to permanent incontinence or weeping fistulas. One solution was to replace the horizontal by an oblique cut, thereby making a larger incision and also cutting cleanly the parts that otherwise tended to tear. This had been Frère Jacques's method and consequently was not immediately seen as an improvement by his Parisian critics. However, in the 1720s it was taken up by the London surgeon William Cheselden (1688–1752), and the latter's success encouraged Parisian interest. Morand in 1729 crossed to London to see the technique for himself; René-Jacques Croissant de Garengeot (1688–1759) and his colleague Perchet experimented on cadavers at the Charité;[18] and finally, La Peyronie, the king's premier surgeon, gave the lateral method, as it was called, his own imprimatur.

The oblique incision remained a method, none the less, still fraught with difficulties when the stone was large, and the incision that eventually won respect was one that was made, not above the neck of the bladder (as was the case in both the horizontal and lateral cuts), but to the side and above the urethra, which thus ensured that there were no parts to cut through except flesh, muscle, and the bladder wall. This incision was invented by the Parisian surgeon Pierre Foubert (1696–1766) in the 1730s, then perfected by Thomas who cut from top to bottom rather than bottom to top, on the grounds there was less chance of missing the bladder.[19] Its great advantage was that where the stone was large, a special *bistouri* or surgical knife could be inserted into the *tenettes* and resisting muscle could be cut during the act of extraction. According to Antoine Louis, writing in the *Encyclopédie*, Foubert's method of entry was one of the best discoveries 'of the past fifty years, during which time the whole of Europe has worked cease-

[17] For a good account of the developing technique, see the article by Antoine Louis on the operation for the *taille* in D. Diderot (ed.), *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers* (17 vols.; Paris, 1751–65), xv. 846–56.

[18] De Garangeot gives an account of his experiments in his *L'Opération de la taille par l'appareil latéral, ou la méthode de Frère Jacques corrigée dans tous ses défauts* (Paris, 1730). Perchet later became premier surgeon of the king of Spain: see *Mémoires de l'Académie royale de Chirurgie*, 3 (1757), 113.

[19] Foubert's technique was made public in 'Nouvelle Méthode de tirer la pierre de la vessie', *Mémoires de l'Académie royale de Chirurgie*, 1 (1743), 650–80.

lessly to perfect this operation'.[20] Yet there was still a residual problem that Louis claimed himself to have solved. Thomas's incision encouraged the formation of a fistula as urine tended to drain through the wound rather than the bladder. This post-operative complication, however, could be cured by lying the patient on the opposite side to the wound and placing an *algalie* or drainage probe through the urethra into the bladder.

Yet if the fundamental characteristic of French eighteenth-century surgery lay in the consolidation and perfection of existing knowledge, this is not to gainsay the fact that a number of surgeons (and the number grew as the century progressed) were innovative as well as inventive. To begin with, several operations were not only rescued from the charlatans and improved, but also completely reconceived. This happened in the case of the resolution of cataract, presumably one of the most pervasive and disabling conditions to affect an ageing population. Traditionally empirical eye-surgeons had attempted to correct cataract by lowering the crystalline lens, and it was in this form that the operation entered the skilled surgeon's repertoire in the early decades of the century and was publicized in the works of the Douai physician Michel Brisseau and of surgeons such as Charles Saint-Yves (1667–1733) and John Thomas Woolhouse (*c.* 1650–1734).[21] In the 1730s and 1740s, however, Daviel in Marseilles developed a completely new technique of solving the problem by extraction through incising the cornea. The operation was first performed on a religious hermit in Provence and was only partially successful, but Daviel honed his technique and eventually claimed an 80 per cent success rate. Having cured the duc de Villars he was called to Paris and installed at the Invalides in the late 1740s. Over the next few years, in the spirit of Enlightenment openness, Daviel revealed his new operation to the world and the resolution of cataract by extraction became gradually established as the standard technique, championed by the surgeons of both Paris and Montpellier.[22] At Montpellier it was perfected by Pierre-François Bénézet Pamard (1728–93). Admittedly, Daviel's technique had not been universally adopted on the eve of the Revolution but stalwart supporters of lowering of the crystalline lens, such as Moïse-Benoît Méjan of Martigues, were a dying breed.[23]

Furthermore, the most imaginative and daring surgical innovators, usually to be found in the final decades of the Ancien Régime, did not just reconceive

[20] *Encyclopédie*, xv. 853.

[21] The latter was the oculist of the exiled James II and corresponded with Hans Sloane, secretary to the Royal Society. His most important publication was *Dissertationes opthalmicae de cataracta et glaucomata* ... (Frankfurt-on-Main, 1719).

[22] See esp. 'Nouvelle méthode de guérir la cataracte par l'extraction du cristalin', *Mémoires de l'Académie royale de Chirurgie*, 2 (1753), 337–54.

[23] Dulieu, *Chirurgie*, 192–3. Méjan was called in to attempt to resolve the cataract of the 80-year-old Montpellier surgeon Thomas Goulard, after extraction had failed.

existing operations but invented entirely new ones or promoted operations traditionally decried as impossibly dangerous. Many of these innovative operations never got further than the drawing-board, such as Delaporte's suggestion that an ovarian cyst could be removed by surgery. Others were attempted once, then forgotten: no one, for instance, seems to have repeated Jean Faget's resection of an anal cancer in 1739.[24] But one hitherto-outlawed operation had definitely gained grudging acceptance among the surgical élite by 1789: the Caesarean on a live mother. In the sixteenth and seventeenth centuries this operation had been performed, but only by a handful of rural surgeons: leading surgeons had always eschewed it on the grounds of the suffering it would cause the mother and its virtually certain lack of success.[25] In the eighteenth century, however, the operation began to gain respectability, even if it was still not enthusiastically championed at the end of the Ancien Régime.[26]

The first positive account by a Paris surgeon of the Caesarean operation was published in 1743. Its author, Jean-François Simon (d. 1770), did not so much endorse the practice as offer a number of examples from the first half of the eighteenth century of the operation's successful performance in France.[27] It was an attempt to separate fact from fiction and build up an accurate casebook. At this juncture, it is evident that the Caesarean, if performed, was still only undertaken by rural surgeons. The most bizarre case cited was the Caesarean performed on one Magdelain Gourdain of the parish of Neuville-le-Dorant, near Guise in the Champagne, in the 1730s. The mother had been in labour for three days and on the arrival of the local surgeon at the midwife's summons demanded that he deliver her by Caesarean section. The surgeon had never heard of the operation and initially refused, but eventually he concurred and the baby was delivered successfully. When asked later by Simon himself why she had wanted a Caesarean, Madame Gourdain replied that 'she had heard it said that women of quality gave birth in this fashion'.[28]

However, Simon did offer one example of a Caesarean performed by a Paris surgeon, which revealed that not only Simon but a number of his colleagues in the capital were beginning to change their minds about the operation's feasibility. In 1740 Soumain had successfully performed a Caesarean on the 37-year-old Mademoiselle Desmoulins whose small size (she was 3 feet 1 inch tall) and deformed pelvic structure made it unlikely she would be able to deliver a baby

[24] P. Huard, *L'Académie royale de Chirurgie* (Paris, 1967), 30, 36. Both Delaporte and Faget were Paris surgeons.

[25] See above, Ch. 5, Sect. C.

[26] For a general account, see J. Gélis, *La Sage-Femme ou le médecin? Une nouvelle conception de la vie* (Paris, 1988), 361–72.

[27] Simon, 'Recherches sur l'opération césarienne', *Mémoires de l'Académie royale de Chirurgie*, 1 (1743), 623–49.

[28] Ibid. 2 (1752), pp. lxvii–lxix.

naturally. After waiting four days in the hope of sufficient pelvic dilation, Soumain finally decided on the operation but only after consulting nine other Parisian surgeons, including the royal accoucheur Nicolas Puzos (1686–1753): 'These gentlemen touched the patient, and being certain of the impossibility of her giving birth, were of Monsieur Soumain's opinion.'[29]

Soumain's operation was a professional breakthrough. Thereafter, and especially in the 1770s and 1780s, a number of surgeons in Paris and other big cities followed his lead and began to establish the operation in the élite surgeon's repertoire. When the Paris surgeon and accoucheur Jean-Louis Baudelocque (1745–1810) came to write a memorandum advocating the operation in the late 1790s he was able to cite seventy-three cases of its performance since 1750, nearly all by city surgeons.[30] In Paris by 1789 a further twelve surgeons had attempted the operation, including Baudelocque himself, who had practised it twice, for the first time in July 1785 in the presence of two Paris physicians and a number of surgical colleagues, including Pierre-Joseph Desault.[31] According to the surgeon Jacques Tenon the operation had been performed six times at the Paris Hôtel-Dieu between 1773 and 1785.[32] Baudelocque defended the operation on the grounds it was the only way to save both mother and child. If the operation was not performed in cases where a natural delivery was impossible, the mother would almost certainly die a cruel death, while the child would definitely expire, as surgeons laboured to deliver it in pieces with hooks.[33] Moreover, an alternative and ostensibly more attractive method of counteracting pelvic abnormalities by cutting the symphysis pubis (the pubic joint), which had been invented in the late 1770s by the physician Jean-René Sigault, had proved sadly unsatisfactory.[34] However, it is not difficult to see why many surgeons remained sceptical of the Caesarean section even in the 1790s despite Baudelocque's encomium: the maternal death rate was embarrassingly high. If the children were generally saved, two out of three mothers were lost, including

[29] Ibid. 646–9. For male midwifery in the 18th cent., see below, Sect. E.

[30] Jean-Louis Baudelocque, *Two Memoirs on the Cesarian Operation*, ed. and trans. J. Hull (Manchester, 1801). The memorandum had been read to the Paris Société médicale d'émulation (a post-revolutionary medical club) in 1798: for this, see Conclusion, Sect. D.

[31] Baudelocque, *Two Memoirs*, 82–3. Desault performed Caesareans in the 1790s (see p. 86).

[32] Ibid. 92.

[33] Ibid. 15. This was the traditional 17th- and early 18th-cent. method of releasing the foetus in difficult deliveries, although the use of forceps was well established by the time Baudelocque was writing: see below, Sect. E.

[34] Baudelocque, *Two Memoirs*, 48–59. By 1787 there had been 34 sections of the symphysis pubis recorded. Baudelocque described the section as: 'This bold project, worthy of the 18th century'. Sigault had first proposed the operation in 1767 but had not found support among the Paris surgeons: see Gelfand, *Professionalizing Modern Medicine*, 153; also Gélis, *Sage-Femme*, 372–7.

both Baudelocque's own patients.[35] It is hard to believe that the operation would ever have gained respectability but for the new sentimental attitudes towards children promoted by the Rousseauian Enlightenment.[36]

At its best French eighteenth-century invasive surgery was skilful, imaginative, and on occasion innovative and daring. As a result, on the eve of the Revolution, traditional major operations at least could be performed much more quickly[37] and safely than ever before. The reason for this lay not just in improvements in operative skill and technique but in a better empirical understanding of how to stem blood-flow and heal incisions. Among Jean-Louis Petit's many contributions to surgical progress was his promotion of the compression rather than the ligation of surgical wounds, a procedure that stemmed from his observation of the natural process of haemostasis. Embraced by many surgeons from the 1730s, the technique helped to reduce the dangers of sepsis by allowing the wound to drain more easily.[38] Inevitably, given the limitations of post-operative care in the period, even routine major operations, such as lithotomy, were still occasionally unsuccessful, as the casebook of the late eighteenth-century Beauvais surgeon Jean-Baptiste Langlet (or Lenglet) poignantly reveals. Although most of Langlet's lithotomy patients survived, especially children, his first recorded attempt at the operation, on one Pierre-Joseph Laviral, a 22-year-old native of Béthune, in February 1782 was a disaster: the large stone broke, the operation took twenty-five minutes as the surgeon tried to extract as many fragments as he could, and the patient in the following weeks remained in torment, rendering a number of stones before finally dying on 25 March passing blood through the urethra and the fistula which had formed between the bladder and the perineum.[39] The failures of Langlet and his colleagues, however, should not detract from the successes. Invasive surgery did advance in the eighteenth century, if many patients must have been left with uncomfortable side-effects such as incontinence.

However, if the eighteenth century was an era of surgical advance in France, it must not be thought that major operations came to be frequently performed

[35] Baudelocque, *Two Memoirs*, 64–93: an analysis of 73 Caesarean operations performed since 1750.

[36] Baudelocque claimed that it was distressing to destroy children all the time to save the mother: ibid. 42.

[37] A lithotomy (*grand appareil*) could be supposedly performed in three minutes.

[38] Antoine Louis, 'Eloge', of Jean-Louis Petit, *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), pp. lxvii–lxix.

[39] BM Reims MS 1038, Langlet's casebook, fo. 4. It is impossible to know if Langlet recorded all the major operations he performed; apparently his busiest year as a lithotomist was 1790 when he performed the operation five times: ibid., fo. 82. In 1785 he began to use an instrument invented by the Paris physician Vicq d'Azyr, which he found extremely easy to manipulate (ibid., fo. 31v).

by the majority of French surgeons. Either through ignorance of the procedures or from lack of opportunity, most rural surgeons and their cousins in small towns were normally limited in their strictly surgical activities to reducing the many fractures and dislocations that resulted from falls and injuries at work. Thus, the Provençal surgeon from the village of Venterol, Jacques Long, only performed two major operations in seven years in the 1770s. The first in 1778 was a Caesarean performed on a woman in the neighbouring village of Dieulefit who had been in labour for eight days: the baby was dead on delivery but the mother seems to have survived.[40] The second, in the same year, was the amputation of a leg of a local farmer, kicked by his mule. Injured in May, the farmer had been initially looked after by another surgeon who had tried to save the leg, but to no avail. Long was called to the farmhouse in early September, pronounced on the need for the operation, and arranged for the patient to be transferred to an inn at Venterol. Here the amputation finally took place successfully on 25 September after the patient had been dosed for a week with quinine.[41]

Major surgical operations were primarily the preserve of the élite surgeons in Paris and the large towns, especially those with hospital appointments. The latter could be very busy. Between 13 and 24 May 1754 Morand at the Paris Hôtel Dieu operated on at least five out of the twelve days. The operations comprised an amputation, the closure of an anal fistula, and a clutch of lithotomies: on 13 May Morand and his colleagues performed eleven; on 24 May, six. Usually, they worked speedily, lithotomizing both young and old in two to three minutes: the one operation on 24 May which lasted seven and a half minutes was occasioned by Morand's failure to extract the stone after two attempts and his decision to shatter it in the hope that it could be evacuated naturally through the urethra.[42] Provincial hospital surgeons would have had a less frenetic life, but they too may have operated almost daily in the spring, the time of the year thought to favour major surgical intervention. On three days in May 1763 Jean-Baptiste Caqué, surgeon at the Reims Hôtel-Dieu, performed four successful cataract operations and one unsuccessful lithotomy on a child. One of his cataract patients, a former clothworker of the Reims parish of Saint-Julien 'saw so well immediately after the

[40] J. Demesy-Maurent, 'Un maître chirurgien dans la Haute Provence drômoise à la veille de la Révolution', *Cahiers d'histoire*, 33 (1988), 61–2: from a study of a surgeon's diary. For the geographical extent of Long's practice, see Map 8*c*. For another ex. of a Caesarean performed by a village surgeon to deliver a dead child, but where the mother definitely survived, see BM Reims MS 1040, pt. 5, fos. 1–4, account of an operation performed by the surgeon Picard of the village of Bourgogne-en-Champagne in 1753, related by a Reims trainee surgeon.

[41] Demesy-Maurent, 'Un maître chirurgien', 67–9, Long's account is cited at length.

[42] BM Reims MS 1073, fos. 112^{r}–113^{v}: diary of hospital operations observed by the physician, journalist, and future professor of the history of medicine at the post-Revolutionary Paris École de médecine, Jean Goulin (1728–99), in 1754–5: it is quite possible that Morand performed other operations in this time that Goulin did not witness.

operation that she could distinguish a pin; the poor woman was so overjoyed to see that she wanted to kiss me to show her appreciation'.[43] The lists of provincial hospital surgeons were swelled by the fact that patients would travel some distance to seek the aid of a reputed operator. Caqué treated patients who had come to the Reims hospital from all over the local area and on 27 May 1764 he closed an anal fistula of a woman who had travelled from Soissons, 56 kilometres away.[44]

Yet surgical advance did not mean that the leading surgeons reached for the knife at the first opportunity. Moreover, they normally restricted their range to what were now standard interventions. Invasive surgery in the treatment of cancer, for instance, was still very rare. In a period of twenty years, Langlet of Beauvais seems to have only operated for the condition on two occasions: once he amputated a penis (which he replaced with a lead catheter) and once he performed a mastectomy. Such conservatism in part reflected the unwillingness of patients to be cut. If some patients accepted surgery stoically or even willingly, like Langlet's lithotomy patient, the 27-year-old Martin Pin, who mounted the table on 12 April 1790 'with a lively pleasure', others were highly reluctant to accept the surgeon's verdict. On 30 May 1763 a workman called Pierre Vuarnet was brought into the Reims Hôtel-Dieu from a near-by village with his arm half-bitten through by a horse. Caqué advised amputation, but the victim demurred until gangrene had set in, by which time it was too late and he died on 25 June.[45] But this conservatism also reflected the dominant surgical ethic among leading surgeons in the Age of the Enlightenment. Much more worried than their predecessors about causing their patients pain and increasingly influenced by the new Hippocratism and its emphasis on natural cures, they believed that major surgical intervention was always the last resort. The best surgeon, according to Antoine Louis, was the man who could cure a patient without placing him on the operating table:

> An operation is the first resource of an alleged surgeon who is only an operator. He finds he never has enough of them. On the other hand, a true surgeon, a man of learning and experience, looks to count his successes only by those operations that he has known how to prevent and by the limbs he has known how to save. An operation, independently of the unfortunate and often mortal cause that prescribes it, is often by itself a very dangerous malady.
>
> The success of major operations is, truly, the surgeons' triumph but this very triumph can be surgery's shame.[46]

[43] BM Reims MS 1040, pt. 1, fos. 6–15: from Caqué's personal journal.

[44] Ibid., fos. 44–7, 58–61. Caqué visited his Soissons patient in 1766 and found her in good health.

[45] BM Reims MSS 1038, fo. 82, and 1040, pt. i, fos. 31–3.

[46] *Dictionnaire de chirurgie* (Paris, 1772), 97–8, art. 'opération'. This is a collection of Louis's articles in the *Encyclopédie* but the text is often slightly changed.

French eighteenth-century surgery was thus not only inventive but also merciful. Indeed, many of the new operative techniques were specifically championed because they supposedly reduced the patient's pain or fear. Morand in 1728 promoted yet another form of adult lithotomy, the *haut* rather than the *grand appareil*, whereby an incision was made in the hypogastrium rather than the perineum. He did so on the grounds it was less terrifying (no probe was placed via the urethra into the bladder to guide the surgeon's knife), more rapid (as the incision was much larger one could insert one's fingers into the orifice and the stone could be found much more rapidly than with the *tenettes*), and less painful (because it was easier to slice through the bladder-wall than its neck).[47] In consequence, leading surgeons had no difficulty presenting their art as the archetypal Enlightenment science: practical, progressive, and humane.[48] The fact, too, that major operations involved the use of complex instruments and required skill and artistry ensured that leading surgeons became glamorous figures in an age which respected all virtuosi, but especially the virtuoso dressed up as a public benefactor. Surgery's progress in the eighteenth century, even if limited to the surgical élite of the cities, inevitably raised the status of the art and helped to justify the monarch's patronage. This rise in status in the public mind was all the easier to effect in that in comparison the art of physic for most of the eighteenth century seemed to stand still.

B. The Stagnation of Physic

For all surgery's progress in the eighteenth century, it remained the case that surgical intervention could only effect the outcome of a minority of diseases. Epidemic diseases such as smallpox, endemic diseases such as malaria, the chronic and painful complaints of the rich and elderly such as gout and arthritis, not to mention trivial but debilitating maladies such as catarrh and conjunctivitis remained totally the province of physic. Indeed, to the extent that invasive surgery was usually still the patient's last recourse, even in illnesses such as the stone, where an operation if successfully performed could be of lasting benefit, nearly all individual maladies in the eighteenth century (except dislocations and breakages) would have been first treated by physical medicine, if not necessarily by physicians.

[47] Morand, *Traité*, 257–8. The operation had been initially developed by Cheselden and other English surgeons. Morand attempted the operation on a 68-year-old in 1727 who died (ibid. 213–49). Morand was an enthusiast for the new technique in 1728, for he believed it would make it possible to extract large stones more easily than by the *grand appareil*, but the technique never seems to have caught on in France: see Louis's art. 'Haut Appareil', in *Encyclopédie*, viii. 68–9, where objections are raised as to its viability.

[48] The surgeons' presentation of their art will be discussed below, Sects. C and D.

However, in contrast to the palpable changes in the way in which invasive surgery was practised by the leading surgeons over the century, there was little development in the manner in which physic was practised by their faculty colleagues. Even a cursory glance at the surviving consultations, notebooks, and medical correspondence of eighteenth-century graduate physicians reveals that their medical practice was characterized by much the same rhythms, rituals, and strategies as their sixteenth- and seventeenth-century predecessors.[49] As a result, the change from a Galenic to an iatromechanical medical philosophy at the turn of the eighteenth century had little effect on the realities of medical practice. Eighteenth-century physicians might mock the ideological principles of their forebears but they respected their practical knowledge. The Montpellier and Paris physician Jean Astruc, for instance, could continue to vaunt the value of Riverius's manual of medical practice more than a century after it had been originally published. 'Its style is clear, diseases are well described in it, and the cure proposed for each one sensible and judicious, and little different from what is in use today, with the result that a physician could practise medicine with success solely with its help.'[50]

A medical consultation would begin, as traditionally had been the case, with a visual study of the patient's complexion, urine, stools, vomit, and spittle. Physicians' accounts of their diagnosis always stressed what they observed at the bedside; specimens were not taken away for further examination, even if eighteenth-century medical scientists had begun the chemical analysis of blood and other humours. Physicians still touched their patients as little as possible, although there was a growing interest in the role of the pulse as a diagnostic. The Montpellier graduates, Bordeu in particular, turned pulse-taking into an art form, but, significantly, Bordeu's analysis remained qualitative not quantitative; he differentiated between different pulse-rates but only impressionistically:

[49] It is much easier to study medical practice in the 18th than in the 16th and 17th cents. This section has chiefly been compiled from the following sources: Library of the College of Physicians, Philadelphia, MS 10a 183, written consultations of Pierre Chirac of Montpellier, *c.* 1700–6 (transcriptions by Cuthbert Constable); BFMP MSS 5241–5, written consultations of the Parisian physician Étienne-François Geoffroy, some 400 cases chiefly from the 1720s; AD Hérault 10F 51, 'Livre de raison' of François Boissier de Sauvages of Montpellier, interesting cases chiefly from the 1750s; BM Dijon MSS 425–32, medical diaries of Vivant-Augustin Ganiare of Beaune 1736–77; BM Avignon MSS 2344–52, 2368, 5618: medical correspondence and papers of Esprit Calvet of Avignon, chiefly 1770s and 1780s; BM Reims MS 1037, Jean-Baptiste Langlet of Beauvais, 'Journal de médecine', late 1780s. For a detailed account of one physician's practice, see L. W. B. Brockliss, 'Consultation by Letter in Early Eighteenth-Century Paris: The Medical Practice of Étienne-François Geoffroy', in A. La Berge and M. Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Amsterdam, 1994).

[50] *Mémoires pour servir à l'histoire de la faculté de médecine de Montpellier*, posthumous publ. (Paris, 1767), 259–60: from a biographical entry on Lazare Riverius. Riverius's work was the fundamental published account of practical medicine in the 17th cent.: see above, Ch. 2, Sect. G.

pulses were fast or slow, and so on.[51] The growing cult of observation from the mid-eighteenth century only encouraged this hands-off tradition. Thus, Lépecq de la Cloture's detailed account of his heroic struggle with the epidemic which afflicted the Norman hamlet of Gros-Theil in 1770 made no reference to his actually touching the poor or their evacuations. Throughout his text his favourite verbs used to describe his actions were *voir* and *observer*. Thus, he was convinced that he was dealing with a verminous epidemic because, having given some of the sick an emetic, he saw worms in their subsequent vomit and stools: he made no attempt to subject the evacuations to other types of investigation.[52]

As in the past, it was the patient's own account of his or her disease that provided most of the information on which a prognosis and diagnosis was made. Hence the physical presence of the sick person was not essential and consultations, as we have seen, were frequently through intermediaries or by letter.[53] Physicians who consulted by letter, like the Parisian Étienne-François Geoffroy, might complain that their lay correspondents had failed to provide an exact-enough account of their illness, but they never had qualms about not seeing their patients personally.[54] It was still assumed that patients, or their intermediaries, could describe their ailments in a meaningful way. Despite the advent of a new medical ideology, discourse between patient and practitioner remained unproblematic. In explaining his diagnosis to a client, Geoffroy did not talk down to his patient but used the vocabulary of the early eighteenth-century faculty thesis, albeit in a more simplified manner. As the Parisian Vicq d'Azyr recognized later in the century, medicine had not yet developed a rigorous, technical vocabulary which would give it the status of a science like mathematics and physics and, by extension, make it the exclusive possession of experts. Its language was too often metaphorical. Physicians talked airily, for instance, of the animal spirits, thereby implying that the nerves were filled with liquid. In so doing, Vicq insisted, 'we have committed a great fault, by giving an individual [concrete] name instead of an abstract one to a little-known property'.[55]

In the eighteenth, as in earlier, centuries the therapeutic ritual the physician proposed depended on the category of the disease he encountered. In the case of his most common foe—infectious fevers, epidemic or otherwise—the physician

[51] Théophile de Bordeu, *Recherches sur le pouls, par rapport aux crises* (Paris, 1756). Bordeu specifically rejected the use of watches or metronomes to measure the pulse (see pp. 12–13).

[52] *Observations sur les maladies epidémiques* ... (Paris, 1776), 185: the title itself is significant. For this text, see above, Ch. 7, Sect. D. Lépecq de la Cloture also emphasized the importance of the pulse: see ibid., 'Discours préliminaire'.

[53] See above, Ch. 8, Sect. E.

[54] Cf. Geoffroy's castigation of the inadequate description that a Mlle Valory had provided him in 1724: see BFMP MS 5242, fo. 217^{v}; in response to a letter of 10 Sept. 1724.

[55] 'Discours sur l'anatomie: deuxième discours', in id., *Œuvres*, ed. J.-L. Moreau de la Sarthe (6 vols.; Paris, 1805), iv. esp. 216.

always began his treatment by prescribing phlebotomy or purgation, and sometimes both. In 1770 when Lépecq was called to Gros-Theil he both bled and purged the victims of the worm fever; a little later, however, when he went to aid the inhabitants of the Norman town of Louviers, struck down by a pestilential fever, he only ordered an emetic to be administered.[56] Further treatment usually included cinchona bark or quinine, which was used as a universal febrifuge in the eighteenth century, and not just in cases of intermittent fever.[57] Indeed, so well established was quinine as a fever cure-all that when it was not always efficacious in a malarial epidemic in the Avignon area in July 1776, Calvet felt the need to report the fact to the recently founded Royal Society of Medicine.[58] Other remedies applied depended on the specificity of the fever. In 1748–50 France was hit by what seems to have been a diphtheria epidemic. Joseph Raulin, who at that time was practising in the Bordelais, claimed to have successfully eased the sore throats of his patients with a camphor tisane and a gargle made of gooseberry and rosewater mixed with lead salt.[59]

The treatment of smallpox, the great scourge of the young of the eighteenth century, was particularly predictable. At the onset of the disease, victims were immediately bled and/or purged regardless of their protestations. When the eldest child of Boissier de Sauvages, Nicolas, went down with suspected smallpox in 1755 at the age of 6, the boy refused to be purged, but his father had him phlebotomized, made him swallow an antimony emetic, and had him dosed with almond oil; his son duly vomited nine times at quarter-hourly intervals and rendered black, choleric-looking stools.[60] When the disease was benign, this was the limit of the physician's intervention. The pustules formed on the third or fourth day (thereby revealing that the disease really was smallpox), the fever disappeared, and the practitioner ordered refreshing drinks to quench the patient's thirst over the coming days. These drinks took many forms but a favourite was lemonade. Voltaire who contracted smallpox in 1723 claimed that he had been saved by drinking 200 pints of the beverage.[61] When, however, complications

[56] Lépecq de la Cloture, *Observations*, 98–172 (47 case histories from the Gros-Theil epidemic) and 339–41. Curiously on pp. 188–9 he says he forbade bleeding in the Gros-Theil epidemic, too.

[57] Lépecq used it on both occasions in 1770, although neither was a malarial fever.

[58] BM Avignon MS 2345, fos. 3–4: Calvet to Vicq d'Azyr, 8 Oct. 1777. He was not deterred from using the specific, cf. his account of his treatment of a fever epidemic that hit the city in Sept. and Oct. 1780: ibid., fos. 20–3: letter to Vicq d'Azyr, 26 Oct. 1780.

[59] Joseph Raulin, *Des maladies occasionées par les promptes et fréquentes variations de l'air* (Paris, 1752), 259–63. Camphor was a calming agent. Raulin eventually became a Paris MD: for the importance of this publication, see above, Ch. 7, Sect. E.

[60] AD Hérault 10F 51, *livre de raison* of Boissier de Sauvages, fo. 119^{v}, *sub* 'filius meus'. Five of Sauvages's surviving seven children had smallpox. In the 1752 smallpox epidemic in the town, Sauvages claimed that there had been 70 hospital cases; all were purged at the beginning (he preferred to use antimony or Glauber syrup) and only 6 or 7 bled: see ibid., fo. 86^{r}.

[61] T. Besterman, *Voltaire* (London, 1967), 100.

arose, the patient was once more obliged to suffer the interventionist attentions of his practitioner. In the 1746 smallpox epidemic at Montpellier, Boissier de Sauvages had two patients at the Hôpital Général, whose fever returned with a vengeance a week after the pustules appeared. One was immediately subjected to a fresh round of bleeding and purging, while the other, who subsequently died, was judged too ill to purge and instead had his feet placed for half-an-hour in a foot-bath of tepid water.[62] Even smallpox patients who recovered naturally could find themselves once again the victims of their doctor's interventionist instincts, for the disease often led to constipation or a difficulty in urinating. The Beauvais surgeon Jean-Baptiste Langlet, who also practised physic (presumably legally) had one such case in 1787. Madame de Brétirel had been bled twice and given three and a half *lavements* or enemas in the first three days of the disease. As the disease declined she was further subjected to eleven more *lavements*, plus drinks of tamarind, to encourage her to defecate.[63]

Again, as in the earlier period, the physician's individuality as a practitioner was better displayed in his dealings with the chronically sick, though here too there was a limit to the changes that could be rung. All such patients, whatever their malady, were immediately put on a bland diet, consisting of herbal tisanes and white-meat bouillons or clear soups. Next the sick person was lightly bled or purged before being subjected to a specific medical regime whose character and length depended on the seriousness and nature of the complaint. In normal circumstances patients would be required to imbibe a course of specialist tisanes and bouillons; take a daily bath in hot, tepid, or cold water; and, in the case of inveterate diseases, swallow a special medicine, often a specific, in the form of a bolus or opiate. The different treatments might be undertaken serially or together and could last many months. At different moments during the treatment it was customary to be purged. Once the physician was convinced that the illness was on the wane, then it was normal to recommend a course of mineral water, either drunk *in situ* or taken at home in bottled form, an option that became increasingly available in the eighteenth century as a thriving trade in bottled spa water developed.[64]

In chronic diseases, even the specific ingredients of the initial diet would depend on the peculiar preference of the individual physician. Geoffroy always

[62] AD Hérault 10F 51, fo. 15r. Immersion in the foot-bath was supposed to resolve the disease. In the 1752 smallpox epidemic at Montpellier, a male patient had been the victim of the disease for twenty days without the pustules appearing: immersion in a foot-bath had the desired effect (see ibid., fo. 119v).

[63] BM Reims MS 1037, Langlet, 'Journal de médecine', fos. 25–7. Langlet recorded the details of four smallpox cases in 1787. Among a wide variety of drinks, he advocated lemonade.

[64] For this, see P. Muller (or Cosma-Muller), 'Entre science et commerce: Les Eaux minérales en France à la fin de l'Ancien Régime', in J. P. Goubert (ed.), *La Médicalisation de la société française, 1770–1830* (Historical Reflections/Réflexions historiques, 9; Waterloo, Ont., 1982). Also, see Ch. 10 below, Sect. B.

wanted his clients to drink tisanes made from *chien-dent* or couch grass, while southern practitioners, like Fizes of Montpellier and Calvet of Avignon, favoured turtle- or tortoise-meat as the basis of the meat bouillon.[65] As in an earlier period, however, the greatest originality was always shown in prescribing specialist medicines for eradicating stubborn complaints or easing their symptoms. Asthmatics (who were frequently confounded with tuberculosis sufferers) were offered a variety of remedies. Geoffroy prescribed an infusion of hyssop, Florentine iris, and saffron to ease asthma attacks and claimed that the disease could be relieved in the long term by a course of sulphur pills and chewing tobacco every morning for a quarter to half an hour.[66] Fizes, in contrast, believed that coughing-fits could be tempered by a concoction of syrup of violets and white whale-meat, while the disease could gradually be brought under control with a bolus of powdered Briançon chalk, coral, Poterius's anti-hectic, and syrup of ivy.[67]

The development from the mid-eighteenth century of a much more empiricist therapeutics did surprisingly little to disturb the essential contours of medical practice.[68] Although professors and their acolytes might herald the dawn of a new therapeutic age when physicians would work with rather than against nature and bleeding and purging would be greatly reduced, there is little evidence the new ideology dramatically affected the standard treatment of patients in the last decades of the Ancien Régime. For all the rhetoric, medical practice in the era of expectant medicine was still interventionist. Lépecq de la Cloture might emphasize the great difference between the neo-Hippocratic therapeutics of his own day and the heroic treatments prescribed by an earlier eighteenth-century generation, epitomized in his eyes by the medical practice of the Montpellier professor and court doctor Pierre Chirac; none the less, as we saw, he continued to bleed and purge.[69] At best in the last decades of the Ancien Régime less blood was taken from patients and emetics and purgatives used more sparingly. Physicians, moreover, whose period of professional activity bridged the mid-century divide, such as Vivant-Augustin Ganiare of Beaune, seem to have scarcely adjusted the rhythms of their medical practice at all.

[65] Smollett was advised by Fizes to take turtle bouillons for his asthma, much to his disgust for he considered turtle meat thickened rather than attenuated his phlegm: see Tobias Smollett, *Travels through France and Italy*, ed. O. Sitwell (London, 1949), 96, 99–100.

[66] BFMP MS 5242, esp. fos. 148–9, a testimonial for sulphur; fos. 153–5, consultation for Mme de Noriville, 14 Sept. 1730; fos. 158–60, consultation for a priest 27 July 1729; fos. 178–9, consultation 15 Dec. 1727.

[67] Smollett, *Travels through France*, 96–9. The anti-hectic was supposed to reduce the symptoms of fever in tuberculosis. Presumably Poterius was the Paracelsian physician of the first half of the 17th cent., Pierre Potier, who published several works in the Holy Roman Empire.

[68] For this development, see above, Ch. 7, Sect. C.

[69] For a statement of his therapeutic beliefs, see *Observations*, 'Discours préliminaire', pp. xvii–cxxxiii, *passim*.

Information survives about Ganiare's practice for a forty-year period: 1737–77. Each year he was confronted by much the same range of diseases: colds, fevers, diarrhoea, sore throats, rashes (erisypelas), and occasionally smallpox; and throughout his working life his treatment remained much the same. The year 1764 can be taken as typical.[70] Victims of coughs and colds were always purged, sometimes late in the course of the disease when the cold was mild but also frequently if the patient did not respond: one lady in March was purged four times, given theriac at night to ease her cough (rather than the usual calming agents, such as whale-blubber), and administered an emetic of ipecacuanha and rhubarb before her cold abated.[71] When the cold moved onto the chest, Ganiare always bled, boasting in the same month of phlebotomizing 10- to 12-year-olds as much as three times. Indeed, always one to blame the patient not the physician for failure, he claimed that a number of his clients were lost because they refused to be bled more than once, 'preferring, by a character trait of stupidity, death to the pain of the vesicatory'.[72] Victims of fever, especially children, were usually left alone where the fever was judged continuous and ephemeral, although bleeding was *de rigueur* after the third day. Sufferers from tertian fever, however, were immediately bled and purged, and if the attacks were persistent given an emetic of quinine and antimony (or in the case of a double-tertian, ipecacuanha).[73] When a mild smallpox epidemic broke out in December, Ganiare changed his tactics. Although he was unsure if phlebotomy was essential to bring out the spots, he was convinced that smallpox victims must be bled from the outset of the disease. Consequently, Ganiare now bled all fever victims *ab initio* in order to anticipate the worst, justifying his action on divine grounds, for 'Providence permits that from this precaution a sensible advantage flows'.[74]

The persistence of an interventionist therapeutics in the last decades of the Ancien Régime, albeit in a mitigated form, emphasizes how difficult it was for the enlightened in the eighteenth century, be they physicians or philosophers, to escape the dead hand of tradition: the *enfants terribles* of the century, unlike their Romantic successors, were always recognizably part of their wider social and

[70] BM Dijon MS 432, pp. 1–79. This was one of Ganiare's busiest years for in 1764 he treated 2,098 patients (p. 79), not counting his hospital patients: for his annual list, see above, Ch. 8 n. 233.

[71] BM Dijon MS 432, p. 11.

[72] Ibid. 13.

[73] Sometimes he added nitre to the antimony (e.g. in May, ibid. 20). When quinine failed to work, as in Oct., patients blamed the drug or the apothecaries, but Ganiare attributed its failure to the poor quality of the air: to that extent he was abreast of contemporary trends (ibid. 51–2). The drug ipecacuanha had been popularized in France at the turn of the 18th cent. by the court physician Jean-Adrien Helvétius: see below, Ch. 10, Sect. A.

[74] BM Dijon MS 432, p. 73; Ganiare repeated his belief in the importance of bleeding in smallpox in 1766, claiming even children of 3–4 years old should be phlebotomized at once (ibid., 258–9).

cultural milieu.[75] The physicians, too, were to an important degree still the slaves of their clients. As reformers such as Gilibert of Lyons realized only too well, patients and their relatives were well informed about the traditional rituals of healing and the common remedies deployed. In consequence, they expected their physicians to practise in the customary manner: 'A physician departs from their views. Without worrying if he is right, it is enough that it is not the received usage for them to oppose stubbornly all that he proposes.'[76] Late eighteenth-century patients expected to be heavily medicated and physicians were forced to adjust their treatment accordingly. The Genevan physician Tronchin, one of the first advocates of expectant medicine, met this problem by continually prescribing placebos when he visited Paris for the first time in 1756, inevitably to the disgust of traditionalist members of the Paris Faculty.[77]

Yet if the emergence of a new therapeutics did not usually lead to the abandonment of traditional therapies and drugs, there were still important therapeutic developments in the last decades of the Ancien Régime. To begin with, there was a significant development in the way fever patients were looked after. Until 1750 most physicians insisted that patients, especially those suspected to have smallpox, should be wrapped up warmly in bed, kept in a well-heated room, dosed with cordials (literally warming drinks), and encouraged to sweat out the disease. In the last decades of the Ancien Régime, however, the fashion changed. An age that saw physician-hygienists praising the benefits of fresh air, not surprisingly found physician-practitioners demanding that patients be released from the tyranny of their bedclothes and kept in well-ventilated rooms.[78] In fever therapy a sweating regime was replaced by a cooling one on the grounds of its proven success.[79] The physician Joseph-Michel Dulaurens who set himself up in the port of Rochefort in 1758, claimed to have been won to a

[75] A point made forcibly in P. Gay, *The Enlightenment: An Interpretation* (2 vols.; London, 1973 edn.), i.

[76] Jean-Emmanuel Gilibert, *L'Anarchie médicinale, ou la médecine considérée comme nuisible à la société* (3 vols.; Neuchâtel, 1772), ii. 105. On their insistence, Ganiare in 1764 had to bleed some patients with feverous colds, although he believed it did no good: BM Dijon MS 432, p. 16. The Beaune physician's diary is full of complaints about the therapeutic prejudices of patients.

[77] H. Tronchin, *Un médecin du XVIIIe siècle: Théodore Tronchin, 1709–1781* (Paris, 1906), 85, see also 43–4, 47–8. Tronchin also emphasized that an interventionist medicine was patient-led. In 1754 Tronchin was singled out by Bordeu as one of the foreign physicians practising an expectant medicine as yet unknown in France: see his art. 'crise', in *Encyclopédie*, iv. 471–89.

[78] Expectant physicians were fresh-air freaks: Tronchin on arriving at court ordered the windows of Versailles be thrown open during the winter when they were usually sealed from All Saints to Easter: see H. Tronchin, *Théodore Tronchin*, 54–5.

[79] It is no coincidence that one of the first physicians to emphasize the primacy of the air in causing disease, also objected strongly to the use of *sudorifiques*, sweating agents, which he claimed were discountenanced by both Hippocrates and Sydenham: see Raulin, *Maladies*, esp. ch. 16, *passim*; in the 1748–9 diphtheria (?) epidemic he rejected cordials, although these had been used a great deal in England (ibid., p. 259).

cooling regime in cases of smallpox while practising as a young doctor in Flanders, where there was already a local form of treatment different from what he had learnt at Montpellier. Finding the cooling regime worked, he adopted it for his own and boasted that since then he had never lost a patient from smallpox, either in the town or in the military hospital, provided the right treatment had begun early enough.[80] Gilibert concurred in Dulaurens's judgement, arguing that a sweating regime produced gangrenous pustules.[81]

Secondly, there can be no doubt that the new experientialist ethic encouraged a greater experimentation with novel remedies when a physician's customary stock was exhausted. It obviously became much easier to justify recourse to unusual cures once faculty professors began to stress that therapeutics should be a more empirically orientated science and that the mechanisms by which a drug worked were difficult to ascertain. In consequence, the final decades of the Ancien Régime saw many physicians championing remedies initially promoted by quacks, and a considerable number inventing and promoting their own.[82] Indeed, establishment physicians began to experiment with empirical cures in the case of inveterate maladies, such as venereal disease, with such abandon that they risked appearing quacks themselves. As a defence against this inevitable accusation, physicians who prescribed particular empirical cures were always quick to distance themselves from quackery *tout court*. Witness the letter written by the Nîmes physician Jean Razoux to Calvet of Avignon in 1763, in praise of Keyser's anti-venereal pills, one of several, highly popular mercury-based empirical cures being successfully marketed in eighteenth-century France. Razoux claimed to be convinced of the pills' efficacy because they had cured so many patients in the army, but he assured the Avignon doctor that he was normally no friend of empirical remedies: moreover, the drug must be used carefully by properly preparing the patient with chicken broths to open up the stomach.[83] Calvet in turn was equally quick to distance himself from quackery when he experimented with new remedies. In 1779 he treated a lady with gonorrhoea with another anti-venereal cure, the sarsaparilla-based tonic of the Paris

[80] *Essai sur les établissemens nécessaires et les moins dispendieux pour rendre le service des malades dans les hôpitaux vraiment utile à l'humanité* (Paris, 1787), 142–50. Significantly, Dulaurens had difficulties persuading his private smallpox patients to accept a cooling regime.

[81] *Anarchie médicale*, i. 215. Ganiare of Beaune was also a keen advocate of a cooling regime; he objected strongly to the custom of bringing out the pustules in cases of smallpox by giving the patient wine, administering confections of hyacinth or crocus, and smearing the face with oil. He, however, was precocious in his support for a cooling regime for he made his views clear as early as 1736; like Raulin, he also emphasized the influence of Sydenham: see BM Dijon MS 425, pp. 5–10. In using Ganiare, then, as an archetypal 'bridge' physician, we have not chosen a conservative.

[82] The 18th-cent. relationship between the world of learned medicine and the world of the quack is discussed at length below, Ch. 10, Sects. B–D.

[83] BM Avignon MS 2352, fos. 215–16: Razoux to Calvet, 2 Feb. 1763.

firm of Boyveau-Laffecteur, without, it seems, much success. He insisted, however, that he was forced to do so by the patient and that he had initially refused on the grounds that 'I knew neither its composition nor its energy.'[84]

Of course, there was nothing new in learned physicians absorbing the cures of the medical penumbra. After all, quinine, the eighteenth century's fever cure-all, had entered the official pharmacopoeia as a quack remedy; so, too, had ipecacuanha, the century's standard defence against dysentery.[85] But medical practitioners in the second half of the eighteenth century were definitely breaking new ground in the extent of their enthusiasm for experimentation. Vicq d'Azyr even wrote on the possible benefits of acupuncture in the treatment of semi-paralysis, if there is no evidence he practised the oriental therapy himself.[86] It must be stressed, however, that many of the new therapies essayed in this period whatever their origin, never became a permanent part of everyday practice. They were treatments tried out on lower-class victims, often hospital patients. As their efficacy always remained unclear, they were never integrated into private medical practice.

This was particularly true of electrotherapy. The discovery of electricity and its powerful effects in the mid-eighteenth century by a number of Europe's experimental philosophers quickly led physicians to wonder whether the new force could be used to heal paralysis. Traditionally, as in the seventeenth century, paralysis was treated by mineral-water therapy, but there were many invalids for whom immersion in the springs of France brought no or only temporary relief. The violence of an electric shock, it was argued, might stimulate motion in the most unrelenting cases of paralysis, and in the late 1740s the first experiments were undertaken at Paris and Montpellier. In the capital, the lead was taken by the surgeons Morand and Louis, the former working at the Salpêtrière under the instruction of the foremost electrical philosopher in France, the *abbé* Nollet; at Montpellier, the pioneering research was performed by the Faculty professor Boissier de Sauvages.

The Paris results were not auspicious, and the two surgeons soon abandoned their trials.[87] Sauvages, however, claimed more success, and accounts of his cures, such as that effected on Ravise, son of a Montpellier blacksmith, were

[84] Ibid., MS 2345, fo. 15–17, Calvet to Vicq d'Azyr, 18 Oct. 1779. Throughout his correspondence Calvet continually attacks empirics: an example of his hostility is cited below, Ch. 10, Sect. C. For Keyser's pills and Boyveau-Laffecteur's *rob*, see below, Ch. 10, Sect. B.

[85] For the initial promotion of these remedies, see above, Ch. 5, Sect. C. Ganiare, as we saw, used ipecacuanha also in cases of double-tertian fever.

[86] 'De l'acupuncture' in id., *Œuvres*, v. esp. 138–9. He compared the effects of acupuncture to those of the caustic moxa.

[87] See Antoine Louis, *Observations sur l'électricité* (Paris, 1747); a résumé of the work and an account of current research can be found in *Mémoires de l'Académie royale de Chirurgie*, 3 (1757), 42–7.

soon being hawked in faculty dissertations.[88] Over the next thirty years numerous Montpellier-trained physicians imitated Sauvages's example and a growing band of electrotherapists practised their art in the kingdom's hospitals. None, though, was able to report widespread improvement, and by 1780, the year in which the Parisian physician Pierre-Jean-Claude Mauduyt de la Varenne (1730–92) published a balanced analysis of the benefits of electrotherapy in the first volume of the *Mémoires* of the recently founded Royal Society of Medicine, disillusion had set in.[89] Calvet, who had witnessed Sauvages's first experiments and had been an enthusiastic electrotherapist, spoke for many of his colleagues when he admitted that his original hopes had proved ill-conceived. Apart from one extremely successful instance, when he had administered an electric shock to one Claude Leidier, who had suffered a fractured and paralysed spine after a bad fall, he could only report apropos of the therapy generally 'some small improvements, a little less feebleness, some equivocal effects whose uncertainty we wished to sweep away out of a desire for success'.[90] As a result, on the eve of Revolution, despite the Royal Society of Medicine's attempt to promote new trials of the therapy—Chambon de Montaux in 1782 was sent to try out electrotherapy on paralytics at the military hospital at Bourbonne-les-Bains[91]—learned physicians had lost hope of harnessing electrical force for medical benefit. Ironically, a treatment which had been pioneered by the medical establishment had now been taken over by the medical fringe and the leading electrotherapist in France in 1789 was the Perpignan cleric, the abbé Joseph Sans.[92]

[88] e.g. J.-Étienne Deshais, 'Dissertation de hemiplegia per electricitatem curanda', 1749, in BFMM Printed Books 275005, vol. i, no. 11, esp. pp. 26–40. Several of Sauvages's experiments are described in his medical notebook: see AD Hérault, 10F 51, fo. 60; see also fo. 87^{v} for his critique of Louis's book. On the Montpellier professor's experiments, see L. Dulieu, 'François Boissier de Sauvages, 1706–1777', *Revue d'histoire des sciences*, 22 (1969), 311–12.

[89] Pub. separately as *Mémoire sur les différentes manières d'administrer l'électricité, et observations sur les effets que ces divers moyens ont produits* (Paris, 1784). Earlier, in 1779, Mauduyt also published extracts from his personal journal detailing his experiments. On his work, see C. C. Gillispie, *Science and Polity in France at the End of the Ancien Régime* (Princeton, 1980), 270–1. For the *Mémoires* of the Society, see below, Ch. 12, Sect. D.

[90] BM Avignon, MS 2345, fos. 17–19: Calvet to Vicq d'Azyr, 17 Feb. 1780 (at fo. 17^{v}), Calvet's reply on receipt of the gift of Mauduyt's 1779 publication. See also ibid., fos. 5–9: Calvet to Vicq d'Azyr, 1 July 1778, account of the Leidier case (at fos. 7^{v}–8^{v}). Vicq d'Azyr was secretary of the Royal Society of Medicine. Calvet was one of its many corresponding members in the provinces: see below, Ch. 12, Sect. D, for the Society's organization.

[91] BFMP MS 5143, Nicolas Chambon de Montaux, 'Observations sur les résultats heureux de l'électricité combinée avec l'usage des eaux thermales salines, d'après les expériences faites en 1782 ... ', various memos.

[92] His papers are in the BFMP. For an account of his attempt to heal the paralysis of La Condamine, the lay champion of inoculation, in Dec. 1770, see BM Reims MS 1068, fos. 80–1: from the papers of Jean Goulin: see above, n. 42.

The disillusionment with electrotherapy was symptomatic of a wider malaise that was to be found among sections of the community of physicians by the Revolution. The development of a new empiricist therapeutics in the second half of the eighteenth century might have made little difference to medical practice qua practice, but it certainly affected physicians' attitudes towards their remedies. In an era when professors such as Barthez implied that most remedies in the physicians' arsenal were useless and that therapeutics was a science still to be forged, some physicians were understandably sceptical about the successful application of any cure. Admittedly, physicians throughout the early modern period were well aware of the difficulties and limitations of their art, but in the sixteenth and seventeenth centuries they could relate the success or failure of their treatment in the individual instance to the will of God.[93] On the eve of the Revolution, with God now a distant figure, some pessimistic physicians believed failure could only be explained as the result of professional ignorance, and not the ignorance of the individual doctor, but the ignorance of the entire community of graduate physicians. As a result, the Hippocratic rhetoric of letting nature cure disease was not always a positive statement of reform, but sometimes the desperate cry of the disillusioned healer. When Calvet dismissed overmedication, he did so in the wearied tone of the defeated:

> The small number of comforts that we call specifics are not always so. We have shortened our lives by remedies. What does a sick animal do? It lies down, it doesn't eat, it doesn't do anything, and it gets better or it does not, without joy or regret ... A consultation of several physicians, especially for an important patient, is always dangerous, often fatal, but commonly laughable.[94]

Admittedly, the physicians' ennui should not be exaggerated. Clearly, there were many leading practitioners in the late eighteenth century, like Lépecq de la Cloture, for whom the era of empiricism was an era of opportunity: they came, they saw, and they conquered. Others, however, languishing in small towns, must not only have lacked clients but also confidence, even if they successfully hid their timidity and uncertainty before their patients. Both optimists and pessimists, moreover, must have cut a sorry figure in comparison to their surgical colleagues in the big cities. Physicians, at best, could promise their countrymen a medical breakthrough in the next generation; leading surgeons, in contrast, could point to success, often miraculous success, in the present. Although the number of diseases in which surgical intervention was possible remained small and patients still feared the knife, the fact remained that top surgeons could bring relief to a variety of life-threatening, chronic, and embarrassing conditions. Physicians through their own art suspected they could do none of these

[93] See above, Ch. 2, Sect. C.

[94] Cited from Calvet's papers by J. Guerin, *Vie d'Esprit Calvet* (Avignon, 1825), 58–9. Unfortunately, we cannot locate or date the source from which the quotation comes.

things: they had begun to echo the misgivings of Molière.[95] Even the one really significant medical advance of the age with which enlightened physicians were closely involved—smallpox inoculation—could only be effected with the surgeon's aid and dexterity. Physicians might lay down the law on how the patient was to be prepared, incised, and looked after in subsequent weeks, but it was the surgeon who actually performed the operation and implanted the pustule.[96]

The failure of physic in the eighteenth century to develop a more efficacious therapeutics, despite all the experimentation of the last decades of the Ancien Régime, ensured that the surgeon not the physician would emerge as the medical hero of the period, however many graduate doctors, like Lépecq de la Cloture, took the new medical ideology to heart and rushed to treat the poor in town and countryside whenever an epidemic struck.[97] The leading surgeons had skills that the well-to-do could appreciate and needed. The surgeons, furthermore, effectively paraded those skills before the public. In the sixteenth and seventeenth centuries the triumphs of a particular surgeon were largely known only to his intimates, colleagues, and clients. In the eighteenth century, on the other hand, the top surgeons were household names. This was not simply because they advertised their success in print, a novel development already alluded to, but because for the last sixty years of the Ancien Régime there was an institution specifically devoted to promoting and trumpeting the collective advance of the art: the Royal Academy of Surgery. The physicians had no equivalent institution until the foundation of the Royal Society of Medicine in 1778.[98] In consequence, even when suitably enlightened physicians did show concern for the common good and rushed successfully to the defence of the king's subjects in the countryside—as many did, who followed in the precocious footsteps of Hugues Maret of Dijon, a physician who had taken his art to the peasantry as early as 1760–1—they had no institutional means with which to blow their trumpet and demonstrate their *bienfaisance* to a wider public until the last decade of the Ancien Régime. In the struggle with the surgical élite for recognition, the lack of such an institution was disastrous. In the eighteenth century respect flowed towards those who could control public opinion.[99]

[95] For Molière's view of learned medicine, see above, Ch. 5, Sect. F.

[96] In all accounts of smallpox inoculation the physician was aided by a surgeon: Calvet e.g. used the Avignon surgeon Sauvan: e.g. BM Avignon MS 2345, fos. 12–15: Calvet to Vicq d'Azyr, 6 July 1779 (at fo. 14). Where the physician was also a trained surgeon, then there was no division of labour: see the account of the inoculations performed by Jean-Baptiste Langlet at Beauvais in the late 1780s and early 1790s in his 'Journal de médecine', BM Reims MS 1037, fos. 18–19. For the physicians' promotion of smallpox inoculation, see above, Ch. 7, Sect. E.

[97] For the Enlightenment conception of the physician, see above, Ch. 7, esp. Sect. F.

[98] See below, Ch. 12, Sects. D and E, for an account of its foundation and activities.

[99] Maret's efforts were only really publicized in 1775 when the government ordered an account of his mission to be published on the grounds that the epidemic attacking various parts of France in that year was similar to the one the Dijon physician had fought in 1760–1: see Hugues

C. The Academy of Surgery

The Academy of Surgery was established by royal letters patent in November 1731 through the efforts of the two leading promoters of the surgical art at court, Mareschal and La Peyronie.[100] The initial aim of its founders was that the new institution would be from the start under royal protection, like the other academies in the capital, such as the Academy of Sciences. The king, however, did not confer this privilege immediately, insisting that royal status would only be granted the Academy once 'experience has revealed the benefits that the public will draw from it'.[101] As a result, the Academy was first established as a *société académique*, no different in status from the majority of provincial academies which, though receiving state authorization, equally did not enjoy specific royal patronage.[102] It was only in 1748, after successful lobbying by La Martinière, La Peyronie's successor as the king's premier surgeon, that the surgical society became officially known as the Académie Royale de Chirurgie, a title it thereafter retained until it was abolished, along with all the French academies, by the Convention in August 1793.

In contrast to the other Parisian academies founded in the reign of Louis XIV, the Academy of Surgery was always closely associated with an existing institution: the Paris community of surgeons. Not only did the Academy meet in the community's headquarters but every member of the corporation was *de jure* a member of the Academy. From the outset, however, a distinction was drawn between a hard core of élite members of the Academy and the majority of Paris surgeons from whose midst they were drawn. All Paris surgeons could attend meetings of the Academy and present papers but only the hard core could enjoy the dignity and emoluments (never great) of an academician. Initially in 1731 this hard core consisted of sixty ordinary academicians and ten associates (out of a Paris surgical community of some 250). Twenty years later, after various distributional changes in the interim, the number of ordinary academicians, henceforth called *conseillers du comité*, was finalized at forty and the number of *adjoints* or resident associate members at twenty.[103] At the same time, the method of appointing academicians changed. From 1739 two-thirds of the élite hard core

Maret, *Mémoire pour servir au traitement d'une fièvre épidémique* (Dijon, 1775), 3. Maret would die in 1785 and be acclaimed by Vicq d'Azyr, secretary of the Royal Society of Medicine, as martyr to the cause of bringing learned medicine to the people: see above, Ch. 7, Sect. F.

[100] There is no detailed study of the Academy of Surgery. For a brief introd., see Huard, *Académie*.

[101] 'Histoire de l'Académie de Chirurgie', *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), p. ii.

[102] For the establishment of provincial academies in 18th-cent. France, see above, Ch. 6, Sect. D.

[103] Huard, *Académie*, 12–15; 1751 *règlement*, art. iii, *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), p. x.

had been elected annually by the Paris community of surgeons; the other third had been directly nominated by the king's premier surgeon. The aim, according to the *règlement* drawn up by La Peyronie, was to excite a spirit of competition among the Paris surgeons.[104] In 1751 the crown changed the rules and the method of recruitment became less open. Academicians still had to be drawn from the Paris community of surgeons, but their appointment was now for life and their selection was controlled by the hard-core élite, who on a vacancy presented the king with a list of three nominees.[105] The Paris surgeons attempted to fight the new arrangements, but in vain.[106] From 1751 to 1793 the Academy of Surgery was a typical Ancien-Régime academy: corporatist, self-perpetuating, and élitist. It was also closely tied to the court for the king's premier surgeon was always its president.[107]

The overt purpose of the Academy was to foster surgical progress by collecting, vetting, and publicizing observations and discoveries with the ultimate intention of composing a sort of surgical equivalent to Justinian's law code.[108] According to the 1751 *règlement*:

> The Academy will busy itself in perfecting the theory and practice of surgery through [promoting] research into and discoveries about the physical structure [*la physique*] of the human body and the causes, effects, and indications of surgical diseases. It will especially be involved with determining with precision the cases in which an operation is or is not necessary, when and how operations should be performed, and what [treatment] should precede and follow them. It will indicate the surgical remedies which are appropriate for each disease and the reasons which determine their employment.
>
> In addition, the Academy was required to collect extraordinary observations about particular remedies and new operations, and compile histories of surgical practices, highlighting where new methods had been substituted for traditional ones and explaining the change.[109]

The Academy performed its statutory function as a creative policeman with a large degree of success, if, unsurprisingly, it never produced a definitive

[104] See Antoine Louis, *Éloges lus dans les séances publiques de l'Académie Royale de Chirurgie*, ed. E. F. Dubois (Paris, 1859), introd., pp. v–vi.

[105] 1751 *règlement*, art. xx, *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), p. xiv.

[106] Louis, *Éloges*, pp. x–xiii: 112 surgeons signed a petition against the new regulations. The Paris surgeons returned to the attack with the collapse of the monarchy: see ibid., pp. xxvii–xxx.

[107] Its organization bore close resemblance to that of the Academy of Sciences, described as an Ancien-Régime institution in R. Hahn, *The Anatomy of a Scientific Institution: The Paris Academy of Sciences 1666–1803* (Berkeley & Los Angeles, 1971), esp. chs. 3 and 5. For this reason, Gelfand, *Professionalizing Modern Medicine*, 63–7, is wrong to see the Academy of Surgery as an institution of professionalization in the modern sense of the term.

[108] A point specifically made in the 1752 brief history of the Academy, *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), p. i.

[109] *Règlement* 1751, arts. xxiv–xxvi: ibid., pp. xiv–xv.

statement about the surgical art. From the beginning academicians, such as Ledran, accepted the authority of the institution and duly reported their observations and discoveries at the Academy's weekly meetings; indeed, from 1751 members were threatened with dismissal if they failed to produce at least one or two papers per year.[110] Provincial researchers, however, had to be enticed to send their findings to a completely Parisian institution, especially before the Academy was granted a royal warranty. This was achieved by adopting strategies already deployed by other Parisian academies anxious to establish an authoritative voice over their disciplinary field. The primary carrot was the annual prize competition. Each year from 1732 the academicians presented a gold medallion, designed by the Académie des Inscriptions and eventually worth 500 *livres*, to the author of the best essay on a surgical subject previously specified. Academicians themselves were not allowed to apply. Even in the early years the competition attracted numerous candidates: twenty-five papers were received in its second year, when the prize was won by Claude-Nicolas Lecat (1700–68), chief surgeon at the Rouen Hôtel-Dieu.[111]

But the annual prize by itself could not ensure that the Academy was kept supplied with a flood of observations from the provinces, so other carrots were gradually introduced to maintain provincial interest and enthusiasm. One was to award assiduous and valued provincial and foreign reporters the title of associate membership. This status was granted from at least 1740 when Lecat and the Marseilles oculist Daviel were admitted but the number of surgeons thus honoured was never great, presumably from fear lest the title be devalued.[112] By 1750 there were only fourteen foreign and nineteen provincial associates and the figure, though not determined by statute, hovered around this level thereafter.[113] In the second half of the eighteenth century, however, associate membership was not the only honorific carrot the Academy had at its disposal. In 1752 a new category of corresponding member was invented, and from

[110] *Règlement* 1751, art. xv: ibid., p. xii. From 1761 no academician could publish a work in which he described himself on the flyleaf as a member of the Academy, unless the book had been approved by his colleagues. Ledran was presented as an exemplary academician, even in the 1730s reserving his findings for the Academy and letting its members vet his publication: see *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), pp. lxxix–lxxx and lxxxix–xcii, reviews of Ledran's books on surgical operations and firearms.

[111] *Mercure de France*, Aug. 1734, p. 1693. Lecat won the prize or was runner-up on a number of occasions in the 1730s. The prize was not always given on the grounds that the contributions were not good enough, thereby enhancing its prestige. La Peyronie left the Academy an endowment to provide a 500 *livres* prize: see *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), p. lviii, from the Academy's *éloge* of La Peyronie (d. 1747).

[112] Their elevation is described in *Mercure de France* (Aug. 1740), p. 1758.

[113] The names of the Academy's foreign and provincial associate members were given each year in the *Almanach Royal*. In 1789 there were 11 foreign and 16 home associates (ibid., *sub anno*, 531–2).

1759, if not before, five French surgeons a year who were not academicians and had presented the Academy with a detailed paper or at least three interesting observations in the previous twelve months were awarded a gold medal worth 100 *livres*.[114]

As a result of these manœuvres the Academy was able to attract a fairly constant supply of books, papers, and observations from all over France. On their receipt, they were placed in the hands of the *commissaire pour les extraits*, whose job was to prepare an accurate and neutral account of their contents. In due course, this account would be read to the assembled members, who would either decide there and then on the value of the submission or would pass it to a special committee for detailed evaluation. Once the Academy had reached a decision, the task of communicating the verdict to the author was given to the *commissaire pour les correspondances*. The latter would draw up a letter containing the Academy's views, which would be read to the assembled company before it was dispatched, thereby ensuring that its message had been officially approved by the academicians.[115]

By successfully soliciting information about new surgical observations and techniques from surgeons all over the country and sitting in judgement on their importance, the Academy throughout its existence fulfilled, albeit imperfectly, its role as the guardian and arbiter of surgical progress. However, as the academicians met in secret (except on one important occasion each year, which will be discussed below) and the correspondence with provincial and foreign surgeons was private, its activities as thus far described hardly belonged to the public domain. In order to fulfil its wider brief, to publicize as well as evaluate new surgical findings and eventually to create an authoritative code of surgical practice, the Academy had to imitate further its sister institutions in the capital and publish the observations and discoveries it felt worthy of becoming part of surgical lore. In this regard, however, it was less successful. While the Academy of Sciences published annual transactions throughout the eighteenth century, the Academy of Surgery was only able to make public and permanent its contribution to surgical progress on five occasions: 1743, 1752, 1757, 1768, and 1774.[116]

The limited publication record of the Academy cannot be put down to lack of enthusiasm. Mareschal for one felt keenly the failure of the first volume of *Mémoires* to appear before 1743 and blamed its absence on his inability to obtain

[114] Huard, *Académie*, 15; *Mercure de France*, Jan. 1759, p. 174: announcement of the prize; it had possibly been instituted earlier. No provision was made for corresponding members in the 1751 *règlement*, although they were a commonplace category in other academies.

[115] These two officials were elected by the academicians. The *commissaire pour les extraits* was also supposed to prepare for the Academy's attention précis of new books on surgery published in France and abroad.

[116] *Mémoires de l'Académie royale de Chirurgie*, vols. 1–3 were repr. in 1761, 1769, and 1778.

ILLUSTRATION 17. Surgery as the servant of the nation in war, Frontispiece to *Mémoires de l'Académie royale de Chirurgie*, I (Paris, 1743). Paris surgeons in the eighteenth century curried favour with the crown by emphasizing their utility on the battlefield. In the engraving, surgery in the guise of a beautiful woman presents the *Mémoires* to a martial Louis XV under the protection of Athena, goddess of wisdom and war, and patroness of craft guilds. In the background the detritus of the battlefield is conveyed to the Invalides, Louis XIV's gift to the old soldier.

the royal sobriquet for the Academy.[117] Nor can the slim publication record be blamed on absence of material, a factor which certainly prevented most provincial academies producing annual proceedings. The real reason lay rather in the way that the *Mémoires* were conceived by the Academy's three perpetual secretaries, Quesnay (1739–51), Morand (1731–9, 1751–64), and Louis (1764–92), who were charged with placing the institution's activities before the public. All three saw the Academy's transactions as educational treatises. They were anxious that the bulk of the volume would comprise learned papers laying out the state of the art in a particular surgical field. They did not want to publish a large number of short, ephemeral, or extraordinary observations received from provincial correspondents. Thus conceived, however, a volume could not be thrown together quickly, using material in the archives. Rather, a volume had to be written from scratch, each member of the appointed editorial committee agreeing to write on particular subjects, then digging in the Academy's archives for illustrative observations. Even detailed papers by Parisian colleagues could be frequently rejected because the operative techniques described were novel or untried. The account of chest fistulas with caries of the sternum prepared by the director of the Rouen academy Pierre-Jean David (1737–84), for instance, was rejected for the 1774 volume on the grounds it contained operations judged 'temerarious, superfluous, dangerous, and scarcely conforming to the true principles of fistula surgery'.[118] In consequence, each volume was the work of only a handful of people, particularly of the secretary himself: Louis, for example, wrote half of the fifth and final volume.[119]

The format of the publication made sense, given the Academy's commitment to creating an authoritative surgical code. The primary duty of the institution was seen to be the relatively conservative one of perfecting surgery as it existed, not expanding surgery's domain. Thus, the secretaries kept accounts of surgical research into hitherto non-surgical diseases, such as appendicitis, even more firmly out of the public domain than accounts of novel operative procedures.[120] But working under such constraints made it inevitably difficult to maintain momentum. That no more volumes appeared after 1774, however, cannot simply be attributed to the difficulty of the task, now that surgery was developing ever faster and the amount of material to be digested by individual committee

[117] Louis, *Éloges*, p. vi, citing Mareschal's letter to the Paris surgeon Faget, 1740.

[118] Cited in ibid., p. lxiv, from a transcription of the minutes of the editorial committee for vol. v which met in 1771 (pp. lxviii–lxx).

[119] In all vols. the secretary provided the lion's share. Quesnay's papers dominated vol. 1 (1743), including an extremely lengthy and not particularly surgical paper on humoral diseases.

[120] For the Academy and appendicitis, see Huard, *Académie*, 29–30. In the 1780s French surgeons interested in appendicitis saw the complaint as a strangulated hernia: see Prudent Hévin, *Cours de pathologie et de thérapeutique chirurgicales* (Paris, 1780).

members was vast. In fact Louis, who had already helped Morand with two volumes and prepared two himself, began the publication of a further one in 1784–5. He was stymied, not by fatigue, but a committee rebellion. Younger surgeons, notably Peyrilhe, could not see the point of maintaining the traditional format and tone. They merely wanted to publish the best papers and observations in the archives. Presumably they had grasped the pointlessness of the task and were beginning to see the Academy as an institution for forwarding and disseminating knowledge rather than policing and perfecting it. Louis, however, demurred and the publication never appeared.[121] His failure to embrace a change in direction was undoubtedly unwise in the light of the *Mémoires*' role as a vehicle for publicizing the art of surgery. By then the physicians had been in possession of their own academy for six years and quickly began to publish rival transactions. Less conservative in direction, the *Mémoires* of the Royal Society of Medicine in the 1780s were annual events and gave the physicians a much-needed boost to their pride and public position.[122]

Yet, if the Academy of Surgery was ultimately unable to fulfil its intended and overt function, it still played a considerable role throughout its existence in helping the development of the surgical art in eighteenth-century France. Besides the obvious encouragement it gave to surgical research, it also fostered the emergence of a distinctive and self-conscious surgical élite. In the course of the eighteenth century French surgeons theoretically became organized into a national body of practitioners under the control of the king's premier surgeon and his lieutenants. In reality, town surgeons remained locked in a myriad of inward-looking corporations with their own identity and traditions, while their rural brothers lived in a rather-less-than-splendid isolation in the hamlets and *bourgs* of the French countryside.[123] The Academy provided an opportunity for the better educated and more enterprising surgeons to escape from their institutional or geographical isolation and make contact with like-minded souls. It provided a novel institutional focus and potential voice to surgeons who would otherwise have lived and cried in an intellectual wilderness. The fact that the Academy was totally dominated by Parisians may have reduced its ability to act as a national rallying-point to a degree, but there is no sign before 1789 that this was resented in the provinces. Most provincial surgeons, it can be presumed, accepted the restriction of membership on the grounds it was natural, a reflection of the historic role of the capital as the European centre of surgery and surgical education. What provincial surgeons sought above all was peer-group recognition of their endeavours and the honorific title of correspondent, which

[121] Louis, *Éloges*, pp. xxiv–xxvi.

[122] See below, Ch. 12, Sect. D. The less polished format of the Society's *Mémoires* may have inspired the younger surgeons' critique of the Academy of Surgery's publication.

[123] See above, Ch. 8, Sect. B.

they could use to good advantage in their local practice as a distinctive sign of their supralocal status and enlightened credentials.

There can be no doubt that the Academy was a national institution. Its most prominent provincial acolytes were unsurprisingly the leading surgeons of the big cities, such as Caqué and Pierre Robin of Reims. Robin, for instance, before he dedicated his life to male midwifery, had tried to make a name for himself as an expert on brain tumours.[124] But even among the small number of associate members there were always one or two representatives of small towns, such as Maigret of Ransonnières, a *bourg* near Langres.[125] In consequence, the Academy's published transactions were peppered with the observations of provincial surgeons or army surgeons stationed on the borders. All told, the five volumes immortalized in print the names of some one hundred and fifty provincial surgeons. As Maps 9*a* and *b* reveal they were located all over France and a substantial minority were established in out-of-the-way towns, such as the two surgeons of Villers-Cotterêts, Tacheron and Thomas.[126] From its early years the Academy had successfully created an alternative surgical network, whose members were associated not through the possession of traditionalist, corporative privileges or secretive court connections, but through a shared commitment to the Enlightenment values of progress and publicity.

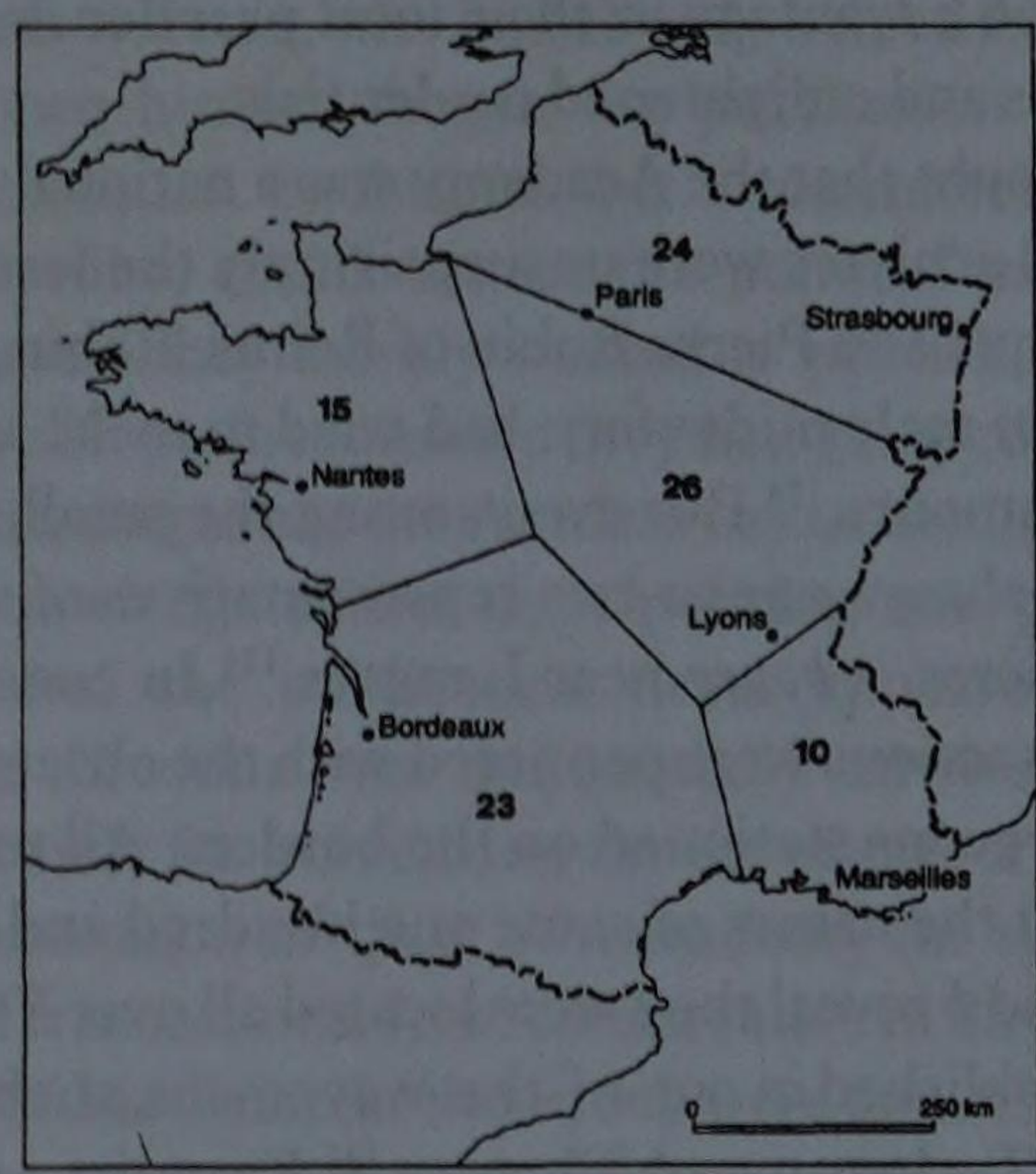
In addition, the Academy definitely helped to consolidate and enhance a positive public image of the surgical art. Surgery had already gained recognition as a liberal, not simply a manual, art, in the wider world of experimental philosophy to the extent that a handful of surgeons were members of the Academy of Sciences in the early eighteenth century and surgical papers were published in its transactions, notably papers by Jean-Louis Petit.[127] The establishment of the Academy of Surgery, however, added new lustre to the art, for no other discipline included within the remit of the Academy of Sciences, be it mathematical, physical, or medical, had been granted an autonomous research base. The simple physical fact that the Academy existed, especially once it obtained titular

[124] His paper on *encephalocèle* was discussed for inclusion in the 1774 vol. For Robin's midwifery career, see below, Sect. E. Caqué invented an instrument for tonsilectomy: see Louis, *Éloges*, p. lxvii. Caqué's correspondence with Louis survives for 1756–9: see BM Reims MS 1060, esp. Caqué's letter of 4 Dec. 1758, where the Reims surgeon expresses his gratitude for being elected an *associé*; from 1751 Louis ran the Academy, although Morand was the official secretary.

[125] Maigret or Maigrot was an associate member at the end of the Ancien Régime. He received one of the medals for assiduity in 1769; by then he was already a corresponding member.

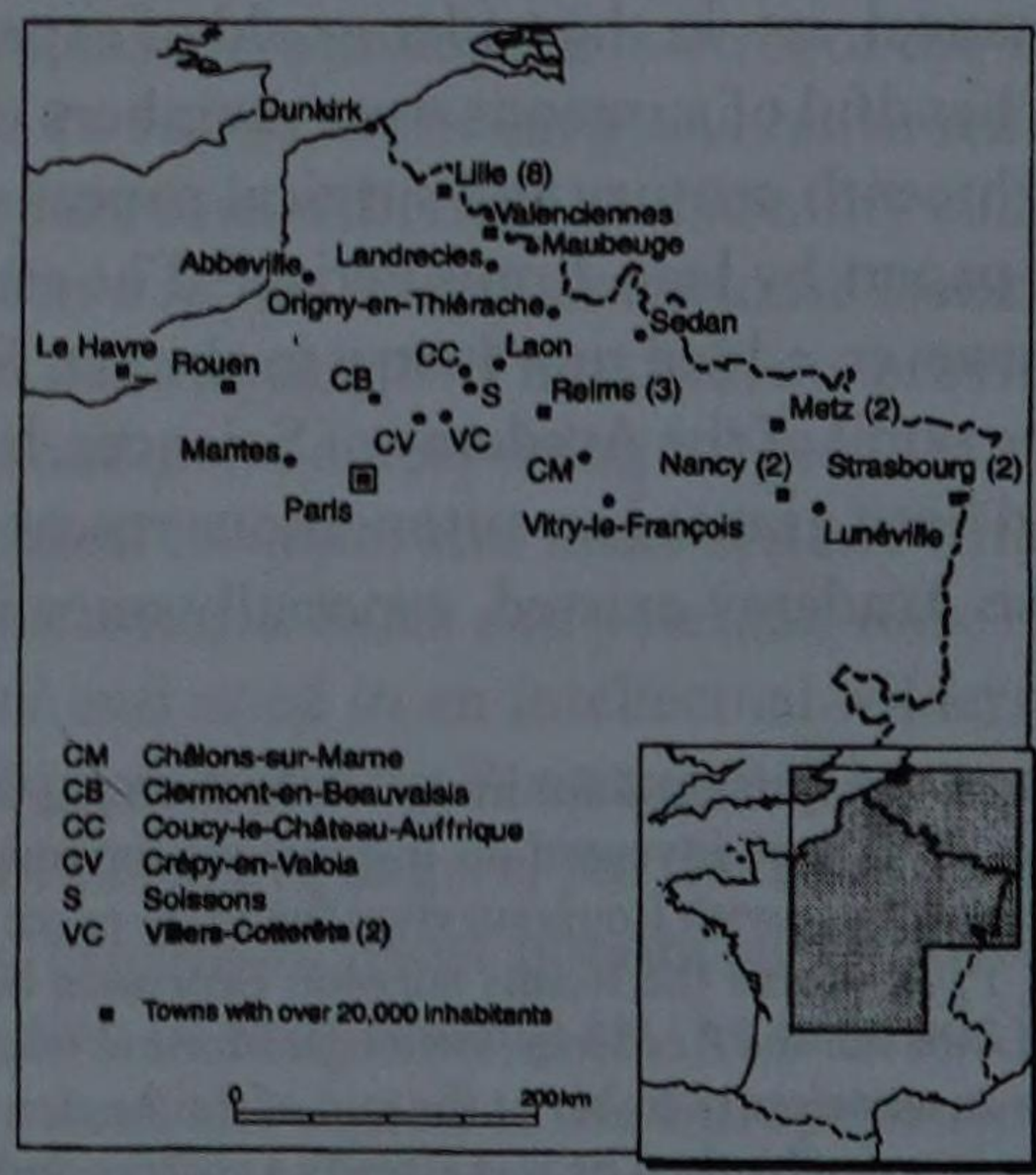
[126] Information based on a study of the index of the five vols. As only the surname is given, some surgeons whose names appear in more than one volume may be father and son. Vol. 2 contained a reference to an observation by Caqué (p. 308 n.).

[127] Petit continued to have papers published in the *Mémoires* of the Academy of Sciences in the 1730s, wherein he promoted the use of compression rather than ligature to stem blood-loss. Petit had become a member of the Academy of Sciences in 1715. Among other surgeon-academicians in the first half of the 18th cent. was Morand from 1722.



MAP 9*a*. Regional origin of provincial surgeons whose observations are cited in the *Mémoires* of the Academy of Surgery

Note: The names of *c*.150 provincial surgeons appear in the *Mémoires de l'Académie royale de Chirurgie*, 1–5 (1743–74). They practised in 104 different locations, of which six cannot be identified. The location of provincial military surgeons is not always given.



MAP 9*b*. Urban origin of provincial surgeons from the north-east of France whose observations are cited in the *Mémoires* of the Academy of Surgery

Note: Numbers in brackets indicate more than one surgeon's observations published.

royal patronage, gave surgery a novel status and visibility. Of course, in an age that was beginning to measure value by results as much, if not more, than royal warranty, that status could not long have been maintained had the eighteenth century not also been a period of spectacular surgical progress. It was crucial, then, that the Academy helped to keep this fact, too, squarely before the public gaze. Although its publication record was poor, it nevertheless helped to popularize the progress of the art beyond the small, if widening, circle of its beneficiaries through the annual public *séance*.

In the first decades of the Academy's existence the public meeting was held in June; after 1751 the date was changed to April.[128] These assemblies were first of all moments to reflect on the Academy's history over the previous year, especially its changes in membership. They were also occasions to announce the winners of the annual prize competition and distribute (in later years) medals to assiduous provincial correspondents. Above all, they were an opportunity to show off to the public the past and present state of the surgical art, as the meat of the proceedings consisted of a series of papers read by leading academicians. In the *séance publique* held on 14 June 1740, Morand began with a paper highlighting the achievements of French surgery in the sixteenth and early seventeenth centuries, recalling to his audience the triumphs of Ambroise Paré and his colleagues. This was followed by a paper read by Prudent Hévin (1715–89) but written by Jean-Louis Petit on the valiant, albeit hitherto unsuccessful, attempt of contemporary surgeons to operate on babies born without an anus. This was followed by papers from Garengeot on stomach hernias, Simon on the value of Caesareans, and de la Faye on an amputative technique that required a fold of skin to be left to wrap round the stump. The session finished with the male midwife Puzos explaining why pregnant women might suffer convulsions from the sixth month and why this was best dealt with by phlebotomy.[129]

The public session was clearly used by the Academy to convince the audience that French, especially Parisian, surgeons were gallantly following in the footsteps of their hallowed predecessors in the fight to save men, women, and children from the perils to which flesh was heir. It also came to be used, in true Enlightenment fashion, as a forum for extolling the contribution of individual genius to the great communal enterprise. This was done through the eulogies that were read from time to time in honour of deceased academicians or associates and became a standard practice from 1751 once Louis became the predominant figure in the institution. The Academy's *éloges*, however, were more than

[128] 1751 *règlement*, art. xlvii, *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), p. xix.

[129] Details from *Mercure de France*, Aug. 1740, pp. 1758–80. The full text of Simon's paper appeared in *Mémoires de l'Académie royale de Chirurgie*, 1 (1743), see above, Sect. A. Puzos believed that the convulsions were caused by the expansion of the womb constraining blood-flow to the lower parts of the body and encouraging a greater flow to the upper parts, especially the head.

tributes to the dead. As with the eulogies given of the former members of other Parisian academies, they also served to present to the public a particular image, in this case the ideal image of the surgeon as innovator and public servant.[130] Although eulogies could be critical of their subjects, they always presented the same values. The surgeon-genius was born, not made; he had often pursued his career against parental wishes; he was educated and lettered; his numerous appointments and honours were the result of merit, not graft; and he was always dedicated to the interests of the poor.[131]

Louis's *éloge* of Jean-Louis Petit (d. 1750) can be taken as exemplary.[132] Petit was presented as a man with no surgical background, whose interest in surgery stemmed from the fact that the physician-anatomist Alexandre Littré[133] lodged in his father's house. Captivated by the dissections that Littré performed in his room, the young Petit was attending the anatomist's private lectures by the age of 7 and was looking after his amphitheatre two years later! Precocity was Petit's hallmark. Apprenticed to a Paris surgeon at the age of 16 in 1690, he was serving in the army corps of the duc de Luxembourg in 1692–3, while giving anatomical demonstrations in Lille and other towns on the north-eastern frontier. A wise surgeon, who understood from an early age when to operate or not, and an incredibly skilful operator whose services were frequently demanded by royalty, he was also a man who realized that true merit only came from his research and publications.[134] Petit's glory, then, lay in the papers published in the transactions of the Academy of Sciences and the Academy of Surgery and in his often-reprinted treatise on bone diseases.[135] Admittedly, Petit had a weak point: his lack of formal classical learning. But in his case 'penetration and discernment perfectly supplied what deeper studies would have been able to add'. As it was, Petit recognized his deficiency and had begun to learn Latin at the age of 40, so successfully that he could read anatomical and surgical works in the language.[136]

[130] For the image of the scientist conveyed by the *éloges* of the Academy of Sciences, see C. B. Paul, *Science and Immortality: The Éloges of the Paris Academy of Sciences (1699–1791)* (London, 1980).

[131] Six *éloges* are printed in *Mémoires de l'Académie royale de Chirurgie*, 2 (1752) and 3 (1757). Louis's thirty *éloges* are printed in id., *Éloges*, ed. Dubois.

[132] *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), pp. lxi–lxxviii.

[133] Ibid., p. lxii. Littré was a Paris MD and a member of the Academy of Sciences: he is mentioned above, Ch. 2, Sect. F.

[134] *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), esp. p. lxvii.

[135] Ibid., pp. lxi–lxiv. Petit's *Traité des maladies des os, dans lequel on a représenté les appareils et les machines qui conviennent à leur guérison* was first published in 2 vols.; Paris, 1723. Louis concentrates on Petit's successful treatment of a ruptured Achilles' tendon.

[136] *Mémoires de l'Académie royale de Chirurgie*, 2 (1752), p. lxxiii. Petit also ensured that his own son, Petit the Younger (1710–37), who became a member of the Paris corporation of surgeons in 1730, was properly educated: see the eulogy of the son, ibid., pp. xliii–xlviii: it contains an interesting account of how Petit ensured that his son chose his profession and did not simply follow in his father's footsteps.

Obviously, the lay audience present at the *séance publique* was always small, so that the public the Academy directly reached through this exercise in professional promotion was limited. However, the event was of much wider significance than it might seem at first glance for in the first decades of the Academy's existence the proceedings were reported at length in the *Mercure de France*, the country's leading and best-selling monthly.[137] Admittedly, after 1750 the *Mercure*'s interest waned and by the late 1760s the journal was only giving a brief résumé of the session, relaying to its readers merely the titles of the papers read, not their contents.[138] Nevertheless, it was only in the final years of the Ancien Régime, by which time the *Mercure* had become totally a literary and *beaux-arts* journal, that the Academy's activities ceased to be publicized in its pages. By then, too, its role as a publicist, at least within the world of experimental philosophy, was less important, for there were now a variety of science and medical journals, such as the *Journal de médecine*, which provided interested readers with details of the Academy's activities.[139]

Thanks to the *Mercure*, the Academy's existence, activities, and values were conveyed to a wider Parisian, French, and even international audience in its crucial formative decades. In many ways, the *Mercure*'s publicity was of greater use in establishing the vibrancy, innovativeness, and utilitarian nature of eighteenth-century French surgery in the public mind than the annual publication of the Academy's transactions would have been. The latter would have reached only the world of medicine; the *Mercure* was the organ of enlightened France, indeed of Europe.[140] The reports in the *Mercure*, too, were not the only source of publicity that French surgeons enjoyed in the second quarter of the century. In the 1730s and 1740s their achievements and new-found confidence were kept firmly anchored in the public's mind through a series of popularizing pamphlets

[137] For the first time in 1734: see *Mercure de France* (Aug. 1734), 1692–1708.

[138] e.g. in 1769 the *Mercure* simply noted that Louis read an eulogy of Lecat, Guyenot a paper on old dislocations, Pierre Dufouart the Younger (1737–1813) one on contagion in diseases, and Jean Lebas one on head-wounds: see *Mercure de France*, May 1769, p. 161.

[139] e.g. *Journal de Médecine, Chirurgie, Pharmacie, etc.*, 75 (1788), 370–9, an account of the *séance publique* held on 3 Apr. 1788. This is notable for its long account of the prize-winning essay on instruments for extracting foreign bodies from wounds, written by the great military surgeon of the Revolutionary era Pierre-François Percy (1754–1825). The *Journal de Médecine* reported the *séances publique* of the Academy of Surgery from at least 1758: see 9. 179–81. It was also a very important medium for promoting surgery as a 'scientific' discipline. A large part of each monthly number was given over to medical observations (i.e. interesting case histories) submitted by members of the three branches of the corporate medical community. Few observations by apothecaries were published, but there were frequently more reports by surgeons than by physicians included. For the medical journals in the last decades of the Ancien Régime, see below, Ch. 10, Sect. C.

[140] Admittedly, an annual publication would have been reviewed in the *Journal des Sçavans*, established in 1665. This was another 18th-cent. monthly which specialized in book-reviews. It devoted a reasonable space to surgical publications, so was another important organ for promoting knowledge of surgical progress.

that argued surgery's right to be treated as a liberal art against the conservative backlash of the disgruntled Paris physicians. As we will see in Section D, the physicians did not sit idly by while the Paris surgeons enhanced their status through royal connivance in the first half of the century. They attempted to restore the status quo ante by going to law and both sides took their case to the new court of public opinion. In the context of the eighteenth century, however, the surgeons sang the sweeter song and the pamphlet war merely helped to consolidate the new image of surgery in the public mind. Indeed, even when the war abated after 1750, the surgeons found a new way of promoting their cause through the *Encyclopédie*, as Section D will show.

The failure to produce an annual transactions, therefore, was ultimately no great loss to the campaign of professional promotion, whatever the loss to surgery *tout court*. The only propaganda weapon that the surgeons were in consequence unable to deploy to the full was the *éloge*, for these were traditionally published in an academy's transactions and were not usually printed separately. Indeed, only two of Louis's eulogies were published in his lifetime, a reflection not only of the lack of the customary outlet but also personal pique: his *éloge* of the Rouen surgeon Lecat in 1769 had been savaged by the dead associate's son-in-law, the academician David, and Louis had been censured, albeit mildly, for certain uncomplimentary remarks made in the oration about Lecat's character.[141]

D. The Debate over Surgery

The Paris Faculty of Medicine suffered several hammer blows to its corporative pride in the first half of the eighteenth century. In 1723 the king's council decreed that the recently promulgated statutes of the Versailles company of surgeons be taken as common, thereby appearing to grant surgeons everywhere the right to practise physic and pharmacy. A year later, before the decree had been annulled and the customary privileges of physicians and apothecaries confined, the king issued letters patent that laid the foundations of the independent Paris École de Chirurgie by establishing and financing six royal demonstrators in surgery attached to the community of Saint-Côme, thus challenging the Faculty's right to monopolize surgical teaching in the capital and undermining its claim to control every aspect of medical science. To add insult to injury, in 1731, as we have seen, the crown permitted the Paris surgeons to form themselves into

[141] Louis, *Éloges*, 129–60: 151–60, Dubois's editorial account of the quarrel. Lecat had criticized Quesnay's pref. to *Mémoires de l'Academie royale de Chirurgie*, 1 (1743), in which the Academy's secretary had outlined the methodological path that would lead to surgery's perfection. He had also had a priority dispute with Louis in the late 1740s over the invention of an operative technique in lithotomizing women; Louis in the *éloge* attacked Lecat on both counts: ibid. 141–4. Quesnay's view of surgical methodology is discussed below, Sect. D.

a scientific academy, dedicated to the progress of the surgical art, a gesture which could only signify that the perfection of surgery was totally the surgeons' concern. Then in 1743, by a simple declaration, the king dissolved the 1655 union between the Paris surgeons of Saint-Côme and the barber-surgeons, created two separate communities of surgeons and barbers in the capital, and laid down that henceforth the former should be trained not only in surgery but also, like the physicians, in the Latin and Greek humanities and philosophy.[142] Finally, the new company of Paris surgeons attempted to reactivate the papal bull of 1579 and petitioned the king to turn the community into a fifth faculty of the University of Paris, so that there could no longer be any doubt that the surgeons were the physicians' equals not their subordinates.[143]

Understandably, the Paris Faculty reacted to this cumulative threat to its status and privileges by contesting the royal initiatives in the courts, in particular before the king's council.[144] At the same time, recognizing the nascent power of public opinion, the physicians appealed to a wider popular tribunal, especially in their attempt to stymie the surgeons' right to teach and to limit entry to masters of arts. Their initial strategy was to use the typical Ancien-Régime device of the *coup de théâtre*. At the opening of the Paris École de Chirurgie in 1724 the dean and his assistants, dressed in their ceremonial robes, processed through the streets to the building in which the teaching was to take place and tried to take it over in the name of the Faculty.[145] As the physicians were unceremoniously locked out by the surgeons, who closed the door in their face, the solemnity of the occasion turned to farce, and the Faculty quickly realized that in the age of the Enlightenment public opinion was no longer to be won by a ritual gesture but had to be wooed and educated. The physicians and their supporters, therefore, took up the pen, the surgeons inevitably did likewise, and for two decades the Parisian reading-public was treated to an apparently endless debate about the nature of surgery and its relationship with physic.[146]

[142] For the royal decree of 1723, the king's letters patent of 1724, and the royal declaration of 1743, see above Ch. 8, Sects. A, B, C, and n. 123.

[143] For the 1579 bull which was never officially recognized in France, see above Ch. 3, Sect. E.

[144] Royal declarations in particular had a dubious legal status. Letters patent had to be registered by the Parlement to have the full force of the law.

[145] [Julien de Prunay], *Mémoire pour le doyen & docteurs-régens de la faculté de médecine en l'université de Paris; Demandeurs ... contre la communauté des maîtres barbiers-chirurgiens* (Paris, 1730), 14. De Prunay was a lawyer.

[146] The debate is discussed in P. Delaunay, *Le Monde médical parisien au XVIIIe siècle* (Paris, 1906), ch. 5, and Gelfand, *Professionalising Modern Medicine*, 67–79. Most of the pamphlets can be found in *Recueil de pièces et mémoires pour les maîtres es l'art et science de chirurgie et pour la faculté de médecine concernant les lettres patentes du roi du mois de septembre 1724 et sa déclaration du 27 avril 1743* (42 vols.; Philadelphia, 1760) (BN8-T18-120). A number also are located in BL Printed Books 551 d. 2 and 777 l. 1. The earliest known pamphlet we have seen is *Observations sur les fonctions attribuées aux démonstrateurs de chirurgie par les lettres-patentes de 1724* (Paris, 1729).

The physicians, not surprisingly, placed great emphasis on the historical and legal position, arguing that their traditional superiority over the surgeons was a historical commonplace and guaranteed in both the 1660 decree of the Paris Parlement which sanctioned the union of the two Paris companies and in the 1699 statutes of the new Paris community which permitted the surgeons to give demonstrations in anatomy and surgical operations but not to teach any other aspect of the art. Their spokesmen realized, however, that the legal case would count for little in the enlightened public mind, unless it could also be shown that the status quo was to the public advantage. In consequence, they emphasized that the changes sanctioned by the crown were not just unhistorical and unnatural, but also dangerous.

In the attack on the 1724 establishment of the royal demonstrators, the argument centred around the Paris surgeons' ignorance. Surgery, the art of treating external diseases, was divided into two parts: the practical and the theoretical. Paris surgeons might be very skilful operators and dissectors (in fact their skill was usually praised), but they knew very little about the circumstances in which surgical intervention was necessary and the methods of pre- and post-operative treatment. This had always been the physicians' domain, for such an understanding was in turn dependent on a knowledge of subjects in which surgeons had never been trained: medical theory, natural philosophy, and humane letters (for a profound knowledge of surgery could only be obtained through reading the surgical works of the ancients and moderns, frequently only accessible in Latin or Latin translation). Theoretical surgery, therefore, could only be taught by physicians, as had traditionally been the case. If semi-educated surgeons once gave courses in theoretical as well as practical surgery, then their apprentices would be improperly prepared:

> Surgical students will be instructed by unlettered surgeons unable to draw from the pure springs [of knowledge] open to men of letters. Physicians, on the other hand, seeing their lessons poorly attended, will make no pains to perfect them, and the spirit of emulation ceasing, there will follow an inevitable decline in knowledge and discoveries.[147]

As it was, however well trained, surgeons always remained relatively ignorant of how to treat external diseases and were in consequence frequently guilty of precipitous or unnecessary surgical intervention, unless guided by the prudent advice of the physician. Many of the Faculty's pamphleteers presented surgeons not merely as ignorant, but as ignorant butchers, and the Faculty doctors as guardian angels: 'How many sick people destined too precipitously to cruel operations, the least unfortunate consequence of which would have been the

[147] [Prunay], *Mémoire pour le doyen*, 32.

loss of a limb, have felt the utility of the gentlest medicaments counselled by physicians!'[148]

The crown's decision in 1743 that Parisian surgeons should henceforth be as well educated as the physicians obviously made this line of argument redundant. Faculty pamphleteers and their provincial colleagues might still mock the ignorance of surgeons generally but they could no longer deploy this traditional gibe against the Paris corps. Paris physicians, therefore, abruptly changed tack. In the 1740s, in ironic contrast to their previous campaign, the Faculty's apologists stressed rather the dangers to the public of demanding of surgeons too sophisticated a level of learning. On the one hand, it was maintained that the number of Paris surgeons would fall dramatically, if aspirant masters were forced to be MAs, and the capital's health would be adversely affected. There would be a knock-on effect, too, across the country for fewer Paris surgeons would mean fewer *garçons* training in the capital as part of their *tour de France*. On the other hand, Faculty supporters stressed the irrelevance of lengthy studies in the humanities and philosophy for the future surgeon. The key to a successful surgeon was manual dexterity and this could only be accomplished by many years' service in a *boutique*. Long years in the classroom were a waste. In this respect the physician and the surgeon required a totally different education. The arts of physic and surgery were like chalk and cheese and required a distinctive preparation. They could not be practised by the same man. As the Faculty stated in a memorandum of 1745: 'the most skilful surgeon is always a very bad physician'.[149] Far from improving the art of surgery, then, the learned surgeon would be its downfall. At the very least, it was stressed in the following year by the Faculty's professor of French surgery Michel Procope-Couteaux (1684–1753), the lettered surgeon would be tempted to turn scribbler and thereby forfeit his public credibility. '[The public] will believe that in order to gain the name of author his hand has learnt the art of holding a pen, but that it has lost the ability to handle instruments, to put lightly in place a surgical appliance, and skilfully to apply a bandage.'[150] Surgeons were honoured as artisans; they would be objects of suspicion as *gens de lettres*.

The surgeons responded to the Faculty's taunts of their ignorance by throwing the charge back in the physicians' face. Throughout the 1730s and 1740s

[148] *Question de médecine, dans laquelle on examine, si c'est aux médecins qu'il appartient de traiter les maladies vénériennes, & si la sûreté publique exige que ce soient des médecins qui se chargent de la cure de ces maladies* (Paris, 1735), 28. The defence of the Faculty's status and privileges became embroiled with the argument over whether venereal disease was the surgeons' or physicians' domain: see above, Ch. 7, Sect. D.

[149] *Second Mémoire pour le doyen et docteurs-régens de la faculté de médecine* (Paris, 1745), 38, cited in Gelfand, *Professionalizing Modern Medicine*, 70.

[150] *Discours sur les moyens d'établir une bonne intelligence entre les médecins et les chirurgiens* (Paris, 1746), 27; an oration given to the Faculty, 16 Jan. 1746.

surgeons claimed that the physicians were ignorant of anatomy and surgery and that historically Paris physicians in particular had added next to nothing to the two arts in comparison with the contribution of the capital's surgeons. Indeed, according to an apologist in the late 1740s the Faculty had produced only one renowned anatomist in the whole of the first half of the eighteenth century, Jacques-Bénigne Winsløw (1669–1760), while the Paris community of surgeons could boast a legion.[151] In consequence to leave surgery any longer to the tender mercies of the physicians was out of the question. 'I do not fear to say that the public interest, the king's glory, and the honour of the nation does not permit that we accept the pretensions of the physicians and leave surgery in a servitude unworthy of an art that is so useful and cannot be too much encouraged.'[152] Furthermore, the physicians were not only presented as ignorant but slothful, for it was claimed that from 1660 until the foundation of the royal demonstratorships, the Faculty had neglected to provide lectures on surgery in French for surgical apprentices and journeymen, as it was required to do. Consequently, the surgeons had been left bereft and in gaining the right to establish lectures in theoretical surgery, the Paris community of surgeons was merely attempting to maintain high-quality permanent instruction.[153]

The surgeons then were presented as both capable of and morally entitled to provide institutional education for their pupils. The pamphleteers admitted that instruction in theoretical surgery should ideally be given by professors educated in the Latin and Greek humanities and philosophy, and agreed that many Paris surgeons in the first half of the eighteenth century were unlettered. But even in conceding that Paris surgeons before the royal declaration of 1743 were not always up to the intellectual mark, the polemicists managed to turn the deficiency to the community's advantage. According to François Quesnay, the surgeons' leading apologist, Paris surgeons had not been historically unlearned. In his opinion, the decline in educational standards was relatively recent and blame for the state of affairs could again be laid firmly at the Faculty's door.

In a lengthy publication of 1744, Quesnay produced an official history of Paris surgery and medicine, completely at odds with the Faculty version.[154] In this version surgery and medicine had originally been one art. In France they had

[151] *Lettre d'un chirurgien de Paris à un chirurgien de province contenant un rêve singulier: Et quelques remarques sur l'excellence de la médecine moderne* (n.p., 1748), 45–51. Winsløw of course was a Dane, not French, but nothing was made of this.

[152] Ibid. 38.

[153] This accusation raised its head in many pamphlets but it was steadfastly denied by the physicians: see [Prunay], *Mémoire pour le doyen*, 33–4. It seems that the Faculty lectures were given privately and not in the Faculty schools until 1718, so that there was an element of truth in the accusation.

[154] *Recherches critiques*. Quesnay originally practised at Mantes and became a member of the Paris corporation in 1737.

only been separated with the foundation of the Paris Faculty of Medicine and the consequent requirement that Faculty doctors be celibate and only consult by letter. Until then the only medical institution in the capital had been the community of surgeons founded in 1033, although initially with no monopoly rights of practice.[155] With the foundation of the Paris Faculty, the physicians and surgeons had evolved into two distinctive communities, but there was no question of one being historically superior to the other. From the time of St Louis, when the community had acquired its first statutes, until the middle of the seventeenth century, the surgeons of Saint-Côme had been university-educated, independent, and innovative, especially in the age of Ambroise Paré, and the community had been treated by pope and king as a quasi-faculty.[156] The Faculty of Medicine, however, had been jealous of the surgeons' influence with the crown and had plotted from the fifteenth century to undermine their independence by using the barbers as their ancillaries, then finally encouraging the union of the two companies in 1655: 'The physicians had silently championed the union of the surgeons and the barbers in order to destroy the surgeons and make them subordinate.'[157]

Yet even after the Faculty's authority over the new company had been defined and confirmed in the Parlement's decree of 1660, the physicians' power over the surgeons had been limited. According to Quesnay, the members of the new company were only subject to the physicians' oversight with respect to minor surgical operations: bleeding, lancing boils, and so on. The Parlement had defined the relationship between the physicians and the new company in the light of the contracts entered into by the barbers and physicians in 1577 and 1644, but these, he maintained, had made no reference to major operations which the barbers had never been permitted to perform.[158] The only limitation that the 1660 decree placed on the traditional independence of the surgeons lay in their right to teach and graduate, and the right to teach was only restricted not abolished. Giving private courses was never banned, and it was always accepted that a public course in surgical operations would include a discussion of the situations in which they were needed and an account of pre- and post-operative treatment.[159] In Quesnay's version, the establishment of the Paris École de

[155] Ibid. 13–21 and 40–4. *Pace* Quesnay ecclesiastics were allowed to see patients before 1400. The 1033 date cannot be substantiated. For the early history of the faculty and corporation, see above, Ch. 2, Sect. A, and Ch. 3, Sect. A.

[156] As late as 1644 Louis XIV is said to have presented the community with letters describing it as a faculty of surgery and part of the University of Paris: see Quesnay, *Recherches critiques*, 219.

[157] Ibid. 322. For Quesnay, the barbers were never barber-surgeons.

[158] Ibid. 331. The history of the relations between the Faculty and the barber-surgeons in the 16th and early 17th cents. is discussed above, Ch. 3, Sect. E.

[159] Quesnay, *Recherches critiques*, 338–9. This of course was not how the Faculty understood the 1660 decree.

Chirurgie in 1724 and the demand that Paris surgeons be MAs instituted in 1743 was no radical departure, as the physicians argued, but a salutary return to the status quo ante. He admitted that the interlude of the united companies had been a disaster for surgery, for the public had no longer been able to distinguish a true surgeon from a vile, ignorant barber, but the problem had now been remedied thanks to the royal initiatives that had begun with the establishment of the royal demonstrators.[160]

As a justification for the Paris surgeons' right to control their own affairs, provide institutionalized education in surgery, and demand higher standards of candidate masters, Quesnay's historical polemic was a *tour de force*, all the more telling for being, apparently, carefully documented. However, probably written in the early 1740s, it did not address directly the Faculty's chief objection to the 1743 declaration: that overeducated surgeons were as dangerous as ignorant ones. In subsequent polemics, therefore, Quesnay and other apologists had to reorientate their defence. Indeed, even before Quesnay's history was published, at least one of his colleagues, Morand, had turned his attention to the Faculty's new line of argument and had begun to explain why the public good did not demand that surgeons be manacled to the operating table from an early age.[161]

Morand's defence of the surgeons shifted the polemical emphasis from the historical to the utilitarian.[162] His argument had two parts. In the first, he outlined the case for the learned surgeon, by emphasizing that the good surgeon required exactly the same training as the good physician. Physic and surgery, Morand believed, were two halves of a single science of medicine, which had been historically split into the treatment of internal and external diseases simply because the science was so vast. Surgeons, therefore, just like physicians, needed a thorough knowledge of the anatomy, physiology, and pathology of the animal economy before they began to study specifically external maladies. In fact, patients would be mad to place themselves in the hands of a surgeon who did not possess this general medical knowledge. Surgeons also needed to be schooled in classical languages in order to understand difficult words used in the art, to be able to read surgical works in Latin, and to be able to communicate with foreigners. There was equally a need to know logic, so that the surgeon could assess

[160] Ibid. 341–50 and 380–4. The history ends in 1724.

[161] Sauveur-François Morand, *Discours dans lequel on prouve qu'il est nécessaire au chirurgien d'être lettré* (Paris, 1743), oration given in the Paris École de Chirurgie at the beginning of the school year, 29 Oct. 1743.

[162] That Quesnay should have initially deployed an historical approach is not surprising given the bias in this direction of contemporary political argument over the respective rights of the *parlements* and the crown: see E. Carcassonne, *Montesquieu et le problème de la constitution française au XVIIIe siècle* (Paris, n.d.), and N. O. Keohane, *Philosophy and the State in France: The Renaissance to the Enlightenment* (Princeton, 1980), chs. 11–15. There was a decisive shift to a more abstract approach in the mid-cent.

correctly the visible signs and deduce the invisible ones, and rhetoric, so that he could persuade his clients to accept his treatment.

It is indeed by an artless delivery [*une élocution facile*] that the surgeon exercises a sort of empire over his patient, and that he finally arrives at inspiring in him feelings of confidence, sometimes by skilfully taking advantage of his mental disposition, sometimes also by overcoming his repugnance through the victorious power of the word.[163]

Finally, Morand insisted that surgeons had to be conversant with physics, since mechanics and experimental philosophy were the twin keys to understanding anatomy and physiology and hence surgical theory. Here Morand drew on the preface Quesnay had recently penned for the first volume of the Academy's transactions, where the secretary had emphasized at length the role of physics in surgical progress.[164] According to Quesnay the contemporary advances in surgery could not be attributed to observation alone. 'Observations [on their own] are no more decisive than ambiguous oracles, or those equivocal laws which interest and prejudice have interpreted at will.'[165] It was only through physical experiments that the conclusions drawn from observations could be tested and proved. It was only through experimentation, too, that a sound body of medical theory could be built up, for Quesnay was a Newtonian who despised theoretical medical systems and believed that a vain theory was as harmful to surgical practice as a simple reliance on observation.[166] Morand agreed, if he was less strident about the dangers of a surgical practice based purely on observation.

In the second part of his polemic, Morand explained why there was no need to concentrate too greatly on practical training. Not only was technical competence useless without a profound knowledge of surgical theory, but the practical skills of the operating table were quickly learnt. There was no need to pick up the knife at an early age, 'for there is no operation which requires a greater dexterity [*coup de main*] than is called for in a thousand things that we do every day of our lives'.[167] Surgeons did not become great because they were well practised. If that argument was followed to its logical conclusion then it would be wise to call on a woodcutter to perform an amputation. Moreover, it was important to realize that operations were always the last resort and that it was only on the

[163] Morand, *Discours*, 18–19.

[164] *Mémoires de l'Académie royale de Chirurgie*, 1 (1743), pp. x–xxxiii.

[165] Ibid., p. xi.

[166] Ibid., pp. xxiv–xxvii. Quesnay was attacked by Lecat for his Newtonianism on the grounds that experimental, as much as traditional, natural philosophers, had their systems (i.e. their underlying assumptions): they just said they did not: see [Claude-Nicolas Lecat], *Remarques sur les mémoires de l'Académie de Chirurgie: Lettre d'un chirurgien de Paris à un chirurgien de province, son élève* (Amsterdam, 1745), 7–30.

[167] Morand, *Discours*, 29.

battlefield that they were a commonplace. Generally, even in large towns few patients needed serious operations. An operation, too, was only a part of the process of healing a patient. Surgeons needed a theoretical underpinning to ensure that they knew when to operate, and good therapeutic knowledge to complete the cure. The physicians' demand, then, that surgeons should concentrate on honing their operative skills was a sure-fire way to disaster.

Morand's argument was repeated and amplified in the following years, while in the telling the tale became more audacious. Not content to argue that surgery and physic were two equal branches of the same medical tree, some apologists began to hint that surgery was of greater worth: its knowledge was more certain;[168] its eighteenth-century history more dynamic, as physic languished under the incubus of theoretical systematization.[169] Paradoxically, practical training *per se* came to be devalued even more. Quesnay, in another lengthy work which appeared in 1748, claimed that few trainee surgeons got the chance to see or perform major operations. Not only were so few actually done outside the hospitals, but even inside their walls a young surgeon could see little of what went on because of the mêlée. As a result most trainee surgeons learnt about major operations from reading books; hence the importance of knowing classical languages. Quesnay could see no harm in such hands-off education. Lithotomies were performed regularly in the Paris hospitals by young surgeons, and they were just as successful as their elders. This was because surgical skill was a matter of intelligence, not dexterity.

> It is not then simply through the continual exercise of the hands that one learns to operate, as people think who have no idea of surgery and formulate one by comparing it with artisanal occupations, wherein one only becomes skilful through a manual dexterity, acquired by daily, repeated exercise.[170]

A debate that had begun with the surgeons asserting their competence to teach surgical theory had developed to a state where surgeons were insisting that physic and surgery were of equal value, that the good physician and the good surgeon were born of a common educational experience, and that in the race to perfect their respective arts the surgeons were way ahead. When they decided to take the case to the tribunal of public opinion, the physicians had opened a can of worms.

However, at the moment when the surgeons were at their most audacious, the pamphlet warfare came to an abrupt end. By two decrees of the royal council of

[168] e.g. [Julien Offray de La Mettrie], *Saint Cosme Vengé* (Strasburg, 1744), 73. The Reims graduate physician defended the Paris surgeons on a number of occasions in the 1730s and 1740s: see K. Wellman, *La Mettrie: Medicine, Philosophy and Enlightenment* (Durham, NC, 1992), ch. 2.

[169] Cf. the lament at the woeful condition of physic in *Lettre d'un chirurgien de Paris*, 44.

[170] *Examen impartiel des contestations des médecins et chirurgiens, considérées par rapport à l'intérêt public* (n.p., 1748), 25.

12 April 1749 and 4 July 1750 the crown confirmed in law its earlier letters patent of 1724 and its declaration of 1743 and the Faculty threw in the towel. Thereafter Paris surgeons not only had the right to organize their own teaching and demand their members be masters of arts but also to call the capital's École de Chirurgie a royal college and insist that candidate masters had spent three years there as a student following a compulsory curriculum.[171] Moreover, the independence of the Paris surgeons was further emphasized by the abolition of the requirement (frequently neglected) that they pay annual homage to the Paris Faculty.[172] The physicians' only consolation was that the council gave their representatives the right not just to attend the final public *acte* in the mastership examination but also to interrogate the candidates.[173] On the other hand, the council did reject the surgeons' petition that the community of Saint-Côme be dubbed a fifth university faculty, so that the physicians were not completely humiliated. On this issue, the surgeons in turn graciously accepted defeat. 'This last title', wrote the king's premier surgeon La Martinière, in a pamphlet addressed to Louis XV, 'was the object of our ambition: but given that your supreme will deigns to accord us the title of *collège royal*, the honour of depending immediately on your majesty is sufficient to console us for any other distinction.'[174]

The physicians were wise to accept the council's verdict. Following on the heels of the crown's decision to take the Academy of Surgery under its protective wing in 1748, it was clear that there would be little chance of the king getting his judges to alter their decision. There was no chance either of getting the Paris Parlement to take up the Faculty's case. In the sixteenth and early seventeenth centuries the royal council had issued several decrees that favoured the original community of Saint-Côme against the Faculty, but the physicians had always had an ally in the *parlementaires*, staunch supporters of the medical status quo.[175] In the second quarter of the eighteenth century, in contrast, it

[171] The first master to be admitted under the new rules, in Sept. 1749, was Antoine Louis: see Gelfand, *Professionalizing Medicine*, 77.

[172] By a Parlement decree of 1672, the newly formed Paris company of barber-surgeons had to present the Faculty with a gold *écu* each year as a token of respect, a requirement confirmed in the royal letters patent of 1724. This present had been agreed on in the original 1505 contract between the old company of barber-surgeons and the Faculty but not specifically confirmed in 1660. The gift was henceforth rescinded. For a critical history of this symbol of surgical subordination, see Quesnay, *Recherches critiques*, 350–5; also, above Ch. 3, Sect. E.

[173] This was a small coup, for the surgeons in the 1740s had ceased to invite physicians to attend any part of the mastership examination, despite the fact that the right of attendance was confirmed in the 1743 declaration: see Procope-Couteaux, *Discours*, 22–3. Under the 1730 reorganization of provincial surgery, provincial physicians had only the right to attend and observe: see above, Ch. 8, Sect. B.

[174] From a pamphlet cited in *Encyclopédie*, iii. 357, *sub* art. 'chirurgien'.

[175] See above, Ch. 3, Sect. E.

proved impossible to play off the two jurisdictions against one another. King and Parlement might have been at loggerheads on other issues in this period, notably over the crown's neglect of the rights and liberties of the Gallican Church, but the monarch's neglect of the privileges of the Paris physicians raised no spark of patriotic fury in *parlementaire* breasts. It can only be assumed that the surgeons had won their case in the battle for public opinion, for it was the support of the Parisian public that sustained the *parlementaires* in their opposition to the crown's ultramontanist policies.[176]

Certainly by 1750 the Paris surgeons had one, highly important, section of public opinion on their side: the Paris *philosophes*. A year after the council's second decree had finally brought the long propaganda campaign to an end, Diderot and d'Alembert published the first volume of the *Encyclopédie*. Even a cursory glance through the pages of a work whose final volumes only saw the light of day in 1765 leaves no doubt as to where the *philosophes*' allegiance lay in the quarrel between the Paris surgeons and Paris physicians. For the articles on physic, the editors made no attempt to commission senior members of the Paris Faculty. Instead, they called upon the chevalier Jaucourt, a Leiden graduate from an earlier era whose knowledge of the contemporary state of French medicine was unreliable; foreigners, notably Haller; and young vitalist Turks originally trained at Montpellier, like Bordeu and Venel.[177] Understandably, the tone of their articles was critical and French physic in the mid-eighteenth century was depicted in the *Encyclopédie* as a decadent art, the prisoner of a false method. Jaucourt's lengthy article on *médecine*, published in 1765, was particularly caustic.[178] He implied that contemporary practitioners had no knowledge of his own medical hero Boerhaave, 'the physician most deserving of public approval since Hippocrates',[179] that they were slaves to therapeutic routine, and that they were only interested in making money as fast as possible. As a final insult to the Paris physicians, he cited Quesnay, the Faculty's bane, as an authoritative voice on the

[176] For a brief introd. to the quarrel between the crown and the Paris Parlement in the first half of the reign of Louis XV, see A. Cobban, 'The *Parlements* of France', in id., *Aspects of the French Revolution* (London, 1971 edn.), 70–7. The crown through imposing the anti-Jansenist bull *Unigenitus* on an unwilling lower clergy and later attempting to subject the clergy to compulsory taxation was accused of undermining the rights of the national Church. For the fullest discussion of Parisian Jansenism in the first half of the 18th cent., see B. R. Kreiser, *Miracles, Convulsions and Ecclesiastical Politics in Early-Eighteenth Century Paris* (Princeton, 1978).

[177] See esp. M. Laignel-Lavastine, 'Les Médecins collaborateurs de l'Encyclopédie', *Revue d'histoire des sciences*, 4 (1951), 351–8; P. Astruc, 'Les Sciences médicales et leurs représentants dans l'Encyclopédie', ibid. 359–68; and J. Proust, *L'Encyclopédisme dans le Bas-Languedoc au XVIIIe siécle* (Montpellier, 1968): for the Montpellier contributors. Haller produced 93 articles and Venel 73.

[178] x. 260–75: this was generally a historical article.

[179] Ibid. 292, art. 'médecins anciens'. The implication, of course, was unfair. By mid-cent. Paris physicians were perfectly acquainted with Boerhaave: see above, Ch. 7, Sect. B.

important role of experientially confirmed theory in the perfection of medical practice.[180] Admittedly, by this date, Quesnay had long since established himself as a physician—he had taken a medical degree at the Lorraine Faculty of Pont-à-Mousson in 1744, the very year he published his historical defence of the Paris surgeons, and a few years later had purchased a court medical office. But this made him no more acceptable to the Paris Faculty as an expert on the progress of physic, for in their eyes he was always the champion of the surgeons' pretensions. Indeed, he had continued his career as the surgeons' polemicist until the end of the decade, despite his degree, and had only given up the secretaryship of the Academy of Surgery in 1751.

On the other hand, the articles on surgery in the *Encyclopédie* were entrusted to leading members of the Paris Academy of Surgery, especially Louis.[181] Louis's articles on *chirurgie* and *chirurgien* which appeared in the third volume of 1753 were used as platforms to continue the promotion of surgery's status at the expense of physic. The first of the two articles emphasized that surgery was more certain than physic, that surgery was historically older than medicine, and that the two arts shared a common theoretical base. Although it was emphasized that surgeons had to be skilful operators, it was equally stressed that the good surgeon knew when and not just how to operate, and readers were reminded that the operation was only one moment in the cure of a surgical disease.[182] The second article was even more polemical, for it offered a highly controversial account of the history of French surgery from the Renaissance, which drew heavily on Quesnay's 1744 publication but brought the story up to date.[183]

According to Louis, the Renaissance had led to a temporary fusion of the arts of physic and surgery, as learned physicians in Italy and Germany had become interested in practising surgical operations. The physicians quickly discovered, however, that they had more surgical clients among the poor than the rich, so they abandoned surgery to the barbers, thereby causing the art's decay. In France, however, surgery escaped this common fate thanks to the existence of a specialist company of educated surgeons, trained in medical science but devoted only to surgery (i.e. the Paris surgeons of Saint-Côme).[184] But even in France the

[180] *Encyclopédie*, x. 275. Jaucourt's argument is drawn, without this being made clear, from the former surgeon's account of the progress of surgery given in the pref. to *Mémoires de l'Academie royale de Chirurgie*, 1 (1743).

[181] Louis produced 70 articles on surgery for the *Encyclopédie*. He later revised them and published them separately in his *Dictionnaire de chirurgie*. He also produced the 39 surgical illustrations in the 3rd vol. of *planches*, which accompanied the 1st edn. of the *Encyclopédie*. He usually signed his articles 'Y'.

[182] *Encyclopédie*, iii. 350–5. The audacity of the suggestion that surgery was superior to physic was toned down by presenting the assertion as a quotation from Chambers's *Dictionary* of the 1720s.

[183] *Encyclopédie*, iii. 355–7.

[184] Throughout the short article Louis makes no distinction between Paris and France.

art had to fight hard to retain its dignity once the physicians started calling on barbers to perform major operations. Indeed, with the forced union of the barbers and surgeons in 1660, surgery's torch might have expired for good, had not a rump of knowledgeable surgeons kept the flame alight and the king in the second quarter of the eighteenth century restored surgery to its proper place. Louis quoted liberally from the royal declaration of 1743 and the conciliar degree of 1750. He presented a picture of a surgical art in the mid-eighteenth century basking in the glow of royal patronage but historically threatened by factious physicians.

Neither article, it must be admitted, made play of the progress of French surgery in the first half of the eighteenth century. But there was no need. Every specific article in the *Encyclopédie* on a surgical disease or a surgical operation was a paean to recent advances and the contribution thereto of French surgeons.[185]

With the opinion-formers of eighteenth-century France on the side of the surgeons and ready to offer them a less confrontational but more insidious propaganda forum, the Paris physicians' cause was truly lost. Moreover, had the Faculty old guard tried to re-establish the traditional hierarchical relationship between physic and surgery in the following decades, they would quickly have encountered dissension within their own ranks. In the second half of the eighteenth century, not only was the surgeons' view of the dignity of their art sustained by enlightened public opinion, but it was also supported by the growing number of enlightened physicians.

There were already signs that some French physicians' attitudes were changing towards surgery before 1750. As early as 1728 Pierre Chirac, formerly premier physician to the regent, Orléans, and in the last years of his life (1730–2) premier physician to the king, forced the Montpellier Faculty to create a special degree in surgical medicine, for physicians who wanted to practise surgery. Candidates were to follow the same programme of studies as those aspiring to the traditional doctorate, except that there was to be a bias towards surgery in the examinations. Admittedly, the degree had few takers before 1750, but its existence emphasized that the Montpellier Faculty no longer felt that the practice of surgery was inherently dishonourable for a physician.[186] In the second quarter of the eighteenth century the Paris Faculty's views were changing too, despite the rhetoric of their propagandists that surgery was a manual art. From

[185] e.g. the article on lithotomy discussed above, Sect. A.

[186] Dulieu, *Chirurgie*, 175–7. Chirac was La Peyronie's patron and was seen, posthumously, by the surgeons in the second quarter of the century as one of the few 18th-cent. physicians to rise above the common mediocrity: see e.g. *Lettre d'un chirurgien de Paris*, 30. Not all Montpellier physicians were willing to support the surgeons against the Paris Faculty. The king's premier physician Chicoyneau entered the lists on the faculty's side towards the end of the debate.

the 1630s the Faculty had encouraged their students to become cognizant of surgery by the establishment of a special professorship in the subject, whose holder lectured in Latin.[187] From 1724, however, bachelors had to sustain a special public dissertation on surgery in addition to the three traditional theses, and from the 1730s the Faculty demanded that its doctors had a practical, not just a theoretical, expertise in the art: as part of the examination for the licence, bachelors had to perform two week-length practicals in anatomy and surgical operations on a cadaver.[188]

After 1750 the physicians' new-found enthusiasm for surgery developed rapidly. Not only did it become a commonplace for physicians in the second half of the eighteenth century to be well educated in surgery, as many took advantage of the proliferation of private hands-on courses in the subject, but a growing number of Montpellier students actually chose to graduate in the new 'mixed' degree: by 1794 the Faculty had created 627 surgeon-physicians.[189] More importantly, enlightened physicians (very often those most committed to improving the surgical knowledge of graduate doctors) began to voice a novel appreciation of the skills and dignity of their surgical colleagues. The pioneering champion of the surgeon's cause in the Paris Faculty was Antoine Petit, a physician, as we have seen, who gave well-attended private courses in anatomy, surgery, and midwifery throughout the third quarter of the eighteenth century.[190]

In 1757, to mark the beginning of the academic year, Petit gave an oration in the Faculty's schools which outlined his position.[191] On the one hand, he emphasized that there was nothing unseemly in physicians taking up the scalpel; on the other, he praised the progress that surgery had made in the previous decades and stressed that surgery was a liberal art. The separation of the arts of physic and surgery, he insisted, was simply for the public's convenience. The division had to be maintained because it was impossible to train one

[187] Thereby allowing medical students to hear surgical lectures on their own; until then, they had been forced to attend the surgery course in French given to the apprentice surgeons: for this, see above, Ch. 2, Sect. B. For the foundation of the Latin lectureship, see L. W. B. Brockliss, 'The University of Paris in the Sixteenth and Seventeenth Centuries', Ph.D. diss., Cambridge, 1976, 212–13.

[188] Id., *French Higher Education*, 74–5. The Faculty's decision in 1733 was momentous enough to be recorded in the *Mercure de France* (Nov. 1733), p. 2459.

[189] For the explosion in the number of extracurricular medical courses, see above, Ch. 8, Sect. C. Obviously, these courses in surgery and other subjects only flourished because of popular demand; medical students had come to accept the need to extend their knowledge beyond the traditional curriculum.

[190] See above, Ch. 8, Sect. C.

[191] Petit, 'Discours prononcé aux écoles de médecine pour l'ouverture solemnelle du cours de chirurgie', 27 Nov. 1757, in BFMP TMP in 4°, xiii, no. 39. Petit in that year was giving the Faculty course in French surgery, which had been traditionally intended for apprentice and journeymen surgeons.

individual to be both a top-class physician and surgeon, but the existence of the two branches of medicine was in no way a derogation of the surgeon's dignity qua surgeon.[192] Petit's view became standard among enlightened physicians. Gilibert, writing in 1772, had nothing but admiration for the achievements of eighteenth-century French surgeons and evinced pleasure at the sight of surgery marrying with letters. Both physic and surgery, he argued, were 'noble' occupations with separate spheres of competence.[193]

With the physicians' conversion, the social elevation of the Paris surgeons, and by extension that of their learned colleagues in the surgical corporations of the big provincial cities, was assured in fact and not just in law. As late as 1762 the Rouen surgeon Lecat had feared this would never happen. Thousands of conciliar degrees, he prophesied, would not change the public's way of thinking about the general body of surgeons and the literate leaven would never be distinguished in the public mind from the unlettered lump.[194] But Lecat, very much a surgeon of the first half of the century, was too pessimistic. By persistently opposing the privileges bestowed on the Paris community by a king greatly under the influence of his premier surgeon, the Paris Faculty had given the new breed of surgeon a chance to explain and justify the crown's moves to the Parisian and wider public. The surgeons had seized this opportunity and gradually constructed a completely novel, and at times more than a little fanciful, account of the history of medicine and surgery and the relationship between the two branches of the corporative community, which ultimately stressed that the division between physic and surgery represented a division of labour, not a division of status. As the surgeons' account of their art made perfect sense in an age of rapid surgical progress, public opinion was soon educated in the new relational discourse, especially once it had been promoted by the *Encyclopédie*.[195]

Pace Lecat, then, there had been an unequivocal sea change in the social position of city surgeons by 1789. As Section E shows, however, this sea change did

[192] As we will see below, Sect. E, Petit still had some harsh words to say about surgeons who failed to keep to their last.

[193] *Anarchie médicinale*, i. 236–8. See also Jean Verdier, *La Jurisprudence de la médecine en France* (2 vols., Alençon, 1762–3), i. 274–307, where the physician and barrister quotes Petit extensively while defining the reciprocal relation of the three branches of the corporative community.

[194] *Lettre de M. Le Cat* [*sic*] ... *sur les avantages de la réunion du titre de docteur en médecine avec celui de maître de chirurgie, & sur quelques abus dans l'un et l'autre art* (Amsterdam, 1762), 35–7. Lecat counselled colleagues to take a medical degree if they wanted social respect. He applauded the new 'mixed' degree at Montpellier but thought that the faculty was not supportive enough of its holders (p. 32).

[195] The surgeons' account also made sense in the context of the growing 'division of labour' discourse developed by writers on the economy in Europe in the second half of the 18th cent.—notably, of course, Adam Smith, whose *Wealth of Nations* (1776) appeared in French in 1781. For an idea of how the discourse could be used in the political realm, see W. H. Sewell, *A Rhetoric of Bourgeois Revolution: The Abbé Sieyès and* What is the Third Estate? (Duke, NC, 1994), ch. 3.

not just mean that, as the century progressed, the city surgeon could hold his head higher and bask in the novel experience of his patients' respect, as he went about his surgical tasks. Rather, and more worryingly for the physicians, the public revaluation of the surgical art seems to have given the surgeon a desire to break bounds and turn his hand to other parts of the medical art.

E. Boundary-Dissolution

In the sixteenth and seventeenth centuries surgeons in small towns and *bourgs*, where no physicians resided, inevitably acted as general practitioners. In large towns and cities, too, they must have frequently been the physicians of the poor, given the fact that the contemporary canons of medical practice ensured that most graduate doctors would have been fully occupied in looking after the well-to-do.[196] In the eighteenth century surgeons continued to act as surrogate physicians, and doubtless, with the declining number of apothecaries, also practised pharmacy, too, in many towns.[197] The Provençal surgeon Jacques Long, for instance, who inhabited the village of Venterol on the road from Valréas to Nyons, acted as a general practitioner to the surrounding villages, only summoning the physicians in the local towns when his medical patients failed to respond to his care.[198] In contrast, however, eighteenth-century surgeons appear not to have limited their practice of physic to towns and villages that lacked a physician, or to the urban poor who could not afford a physician's services. In addition, they began to compete with resident physicians for their traditional clientele.

The Nîmes physicians accused their surgeon-colleagues of boundary-breaking as early as 1726, recording in their minute-book 'that almost all members of the company [the college] have complained that the surgeons were interfering by seeing patients attacked by continuous fevers, intermittent fevers [*fièvres d'accès*], chest fluxions, pleurisy, and other internal maladies which are not surgery's concern'.[199] Thereafter the accusation was levelled repeatedly by physicians in other parts of France, especially by the Parisian polemicists of the second quarter of the eighteenth century. According to the Paris physician Philippe Hecquet, moreover, the surgeons were not simply content with invading the physicians' space, but were also intent on undermining the position of

[196] See above, Ch. 5, Sect. A.

[197] For the putative decline in the number of apothecaries, see above, Ch. 8, Sect. D.

[198] Demesy-Maurent, 'Un maître chirurgien dans la haute Provence drômoise', 70, for a list of the physical diseases Long treated. For another ex. of a surgeon-cum-general practitioner, see E. Lemay, 'Thomas Herier: A Country Surgeon outside Angoulême at the End of the Eighteenth Century', *Journal of Social History*, 10 (1976–7), 524–37.

[199] BM Nîmes MS 425, fos. 51r–52r, minute 15 Oct. 1726.

the apothecaries. Grown ever more ambitious by the establishment of the Academy of Surgery, they dreamt of setting themselves up as chemists, pharmacists, distillers, and druggists. 'They make plasters and similar compositions (God knows how); then they become involved with handling minerals and metals, and they even dare to go as far as preparing mercury.'[200] The accusation of boundary-breaking, furthermore, was not only levelled by physicians unsympathetic to the surgeons' status pretensions. The belief that surgeons were no longer keeping to their last was reiterated, just as stridently, by the physician-reformers of the second half of the eighteenth century. Antoine Petit maintained that there were six hundred surgeons gaining a living in Paris by practising medicine, while Verdier insisted that provincial surgeons had given up practising surgery altogether and were only interested in persecuting the physicians and stealing from the apothecaries.[201]

It is in the final decades of the century, too, that more carefully documented accounts of boundary-breaking begin to surface, such as the case of the surgeons of Langres. In 1772 Jean-Baptiste Montescot, physician in the town, wrote a despairing letter to the dean of the Montpellier Faculty.[202] For twenty-eight years there had been no *médecin du roi* in the town, for the local physicians had not been able to pay the purchase price. As a result, anyone had been able to practise physic in Langres who had the inclination. The municipal authorities had claimed that policing medicine was none of their business, and the surgeons had taken the opportunity to dismiss the physicians as charlatans and prepare their own drugs. In a recent court case the authorities had even given their support to the malefactors by insisting that a surgeon who had been called to see a patient with an internal disease had to be reimbursed for his visits and the drugs he had supplied, even though he had been acting illegally and his client had rightly refused to pay. Montescot had already approached one of the king's physicians, Quesnay, and got nowhere, so now he was looking for support from his Alma Mater.[203] The Montpellier dean was urged to write to the king's council insisting *inter alia* that no one be allowed to practise physic in Langres whose doctoral letters had not been registered at the Hôtel de Ville or with a royal judicial officer.[204]

[200] *Le Brigandage de la chirurgie, ou la médecine opprimée par le brigandage de la chirurgie* (Utrecht, 1738), 14. This was a particularly apoplectic work as the title suggests. A number of surgeons' companies, notably those of Blois and Chartres, had been accused of practising pharmacy illegally in the mid-1720s: see [Prunay], *Mémoire pour le doyen* (1729), 12.

[201] Petit, 'Discours' (1757), 18; Verdier, *Jurisprudence de la médecine*, i. 352–3. See also Gilibert, *Anarchie médicinale*, i. 308–20.

[202] BFMM AFMM F57, unnumbered series of letters 1772: letter, 24 July.

[203] Quesnay as a former surgeon was a curious choice, all the more that he had publicly encouraged boundary-breaking, as we will see immediately below. On the other hand, he had been Mme de Pompadour's physician and, as a leading physiocrat, was a powerful figure at court.

[204] According to the edict establishing the *médecins du roi* in Sept. 1692 no physician could establish himself in a town without showing his graduation letters to the local royal physician.

Apparently, then, surgeons in towns with resident physicians were increasingly ready to flout the monopoly rights of graduate doctors as the eighteenth century progressed. Nevertheless, some caution is needed in interpreting the evidence, and the boundary-breaking in reality may not have been so extensive and so heinous as the physicians maintained. First, less acerbic critics accepted that not all city surgeons were invading the physicians' territory.[205] Second, there is no evidence that the surgeons' spokesmen ever demanded the right to practise physic willy-nilly or attempted to justify poaching the physicians' clients, even at the height of the public quarrel with the Paris Faculty. Indeed, they always hotly denied the frequently levelled charge that the surgeons were attempting to take over medicine.[206] Only Quesnay in his 1748 pamphlet rang a discordant note by suggesting that lettered surgeons of long experience should be allowed to practise physic among the well-to-do. But even Quesnay was careful to preserve the Faculty's monopoly by demanding that this should be made possible by such surgeons' automatic admission to the Faculty's ranks. He also insisted that the Faculty should retain its senior status in relation to the community of Saint-Côme. At this date, at any rate, if only for presentational purposes, Quesnay was not the ardent free-marketeer and physiocrat he was to be in the *Tableau économique* ten years later.[207]

Moreover, many élite surgeons may well have been practising physic legally. Traditionally, a qualified surgeon remained a surgeon for the rest of his life. Changing one's occupation as a medical practitioner in mid-career happened in the sixteenth and seventeenth centuries, but was frowned upon.[208] In the eighteenth century, in contrast, leading surgeons increasingly obtained the right to practise physic by taking a medical degree. Quesnay himself, as we saw, and La Peyronie and Lecat, to name but a few, all became medical graduates at some time in their careers. Lecat, bizarrely before he had been admitted to a company of surgeons.[209] Admittedly they obtained their diplomas from degree-factories, like Reims, which paid little attention to a candidate's background; none the less, they were legally qualified. Conservative physicians doubtless resented the

This requirement was abolished by the 1707 Edict of Marly; instead new physicians where there was no faculty or college had to register with the local authorities: see Verdier, *Jurisprudence de la médecine*, ii. 193–6. The office of *médecin du roi* is discussed above, Ch. 8, Sect. B.

[205] e.g. Gilibert, *Anarchie médicinale*, i. 238, where the élite Paris surgeons are specifically exonerated.

[206] e.g. *Lettre d'un chirurgien de Paris*, esp. 15, in answer to Chicoyneau's claim that the surgeons wanted the right to practise physic.

[207] Quesnay, *Examen impartiel*, 206–7. Quesnay occasionally used a free-market rhetoric in the pamphlet, suggesting that the sick should be free to call the practitioner they judged best (p. 53), but his general tone was corporatist. For physiocracy, see above, Ch. 6, Sect. C.

[208] See above, Ch. 3, Sect. D.

[209] Lecat took his degree in 1733; he became a member of the Rouen corporation of surgeons in 1734: see Louis, *Éloges*, 131.

ease with which such surgeons could obtain medical degrees and treated them as illegal practitioners, but the surgeon-physicians were playing according to the corporatist rules, especially if, like Quesnay, they seem to have given up surgery after graduating in medicine.[210] Some enlightened physicians even encouraged the trend. Antoine Petit, for one, although keen, as we saw, to keep physic and surgery separate, did not see anything wrong in a surgeon changing his status. In 1765, for instance, he wrote a letter to his erstwhile pupil Calvet, asking if the Avignon Faculty would be good enough to give a degree to a surgeon anxious to turn his hand to medicine, but who lacked a competence in Latin and therefore could not graduate in a more demanding faculty.[211]

In addition, many other surgeons who practised physic among the well-to-do illegally in the eyes of the physicians may not have had a medical degree but have been the inhabitants of small towns and *bourgs* where the presence of a qualified doctor was a novelty. As the number of graduate physicians expanded rapidly in the first half of the eighteenth century, faculty doctors began to set up their stall in towns where they had never before been seen, at least on a permanent basis.[212] This must have inevitably caused tension with the resident surgeons (and apothecaries, too) who would have been used to acting as general practitioners. Surgeons would have been unlikely to have given up their traditional clients, whose families they and their fathers had probably looked after for several generations. Incoming physicians would have seen surgeons who continued to treat internal diseases as contumacious and insubordinate boundary-breakers, but such surgeons' resistance to accepting the faculty doctor's monopoly rights was quite understandable. This may have been the subtext of Montescot's quarrel with the surgeons of Langres.

Finally, the accusations of boundary-breaking must be set in the context of the physicians' own ambitions in the eighteenth century. The physicians, it will be recalled, were busy redrawing and expanding the boundaries of physic. At the very least they wanted to make certain traditional external diseases, such as venereal complaints, part of their own province. Many, however, especially the medical reformers, wanted physicians to monopolize the treatment of the poor as well as the rich.[213] When physicians, therefore, complained of surgeons abandoning their last and invading the territory of physic, they were frequently masking their own boundary-breaking in righteous indignation. Antoine Petit, for example, complained bitterly in 1757 that the surgeons had taken over as the doctors of the poor: as a result, young physicians could no longer learn their

[210] Quesnay supposedly took to medicine because his gout stopped him practising surgery. He did not, of course, give up his association with surgery: see above, Sect. D.

[211] BM Avignon MS 2353, fos. 197–8: Petit to Calvet, 10 Oct. 1765: the surgeon had studied with Petit. For the depth of venality in certain French medical faculties, see above, Ch. 8, Sect. B.

[212] See above, Ch. 8, Sect. D. [213] See above, Ch. 7, Sect. D.

craft by practising among the common people.[214] But it is difficult to accept that he really believed the poor had been traditionally treated by physicians, to any extent. Probably he was talking humbug. The surgeons were definitely aware that physic was on the offensive. Quesnay in 1748 pointed out that the physicians' claims to monopolize the treatment of the poor was a novelty that, once accepted, would leave the poor bereft of aid. There were too few physicians to fulfil the task, and the poor would not summon them anyway because of the cost. It was much better to leave the position as it had always been, whereby the Paris poor were served by apprentice- and journeymen-surgeons. The important thing was that surgeons were trained properly for this function: hence their need to be informed about internal as well as external diseases.[215]

Much of the physicians' *Angst*, therefore, may have arisen from the surgeons' unwillingness to accept the newly drawn boundaries. It is certainly the case that the physicians had little success in wresting the treatment of venereal disease and the stone from the surgeons' grasp, for the surgeon seems to have remained the first recourse of the afflicted, whatever the patient's background. Thus, when Rousseau, one of the century's true hypochondriacs and a figure who bridged the divide between the people and the élite, was suffering from retention of urine after becoming overheated while walking to Vincennes to visit the imprisoned Diderot, his patron Madame Dupin immediately sent for the surgeon Morand. The latter duly tried to probe the *philosophe*'s bladder, failed to insert the wand in the urethra, pronounced that he would be dead within six months, and passed him on to the court surgeon Jacques Daran (1701–84), notorious for his success in curing persistent gonorrhoea with a secret specific.[216] Only when Daran also proved useless did Rousseau see a physician, Jean-Claude-Adrien Helvétius, son of the popularizer of ipecacuanha and father of the *philosophe*.[217]

On the other hand, it would be wrong to discount the accusations of boundary-breaking completely. Many surgeons evidently were practising physic and pharmacy illegally in the eighteenth century, albeit sometimes under extenuating

[214] 'Discours', 16–17.

[215] Quesnay, *Examen impartiel*, esp. 63–86. Quesnay also accused the physicians of wishing to supervise the surgeons' treatment of all external diseases (pp. 164–5).

[216] Daran hailed from the south of France and had served in the Austrian army before settling in Marseilles. He was called to the capital by the king in the late 1740s and ennobled in 1755. For an account of his wonder-cure but not of its contents, which he kept secret and hence led to accusations of charlatanism: see his *Observations chirurgicales sur les maladies de l'urèthre, traitées suivant une nouvelle méthode* (4th edn., Paris, 1758), esp. p. clxxviii, where he claims to have treated 5,000 patients with the disease. (This work was 1st pub. Avignon, 1745, under the title *Recueil d'observations* ...)

[217] Rousseau, *The Confessions*, Eng. trans., ed. J. M. Cohen (London, 1953), 336–7, 340. Rousseau eventually saw three physicians; none, he informs us, did him any good.

circumstances. Moreover, the surgeons' disregard for traditional boundaries was not limited to threatening the dignity and livelihood of the corporative physician and apothecary. By far the best-documented instance of the expansion of the surgeons' domain in the eighteenth century was the appearance of the male midwife.

For most of the sixteenth and seventeenth centuries surgeons took only a limited interest in midwifery. Surgeons expected to be called, more frequently than physicians, to attend protracted labours or difficult deliveries, but normal births were left to the care of women. Paris surgeons wrote on the subject of midwifery and supervised the activities of the capital's incorporated midwives, but they too played no part in the large majority of births in the city, whatever the social status of the mother.[218] The custom of summoning a male midwife to normal deliveries, and by extension to care for the mother during and after pregnancy, developed only in the late seventeenth century. The impetus seems to have come from the court, where in the early 1670s Louis XIV, usually an upholder of the status quo in all respects, used a male midwife, the Paris surgeon Julien Clément (1648–1729), to deliver both the dauphine's baby and the royal bastard born to Louise La Vallière.[219] In the last decades of the seventeenth century the practice quickly spread among the court aristocracy, and in 1711 male midwifery was given the ultimate seal of approval when Clément was ennobled. His letters of nobility specifically stated that his new dignity did not mean he had to give up his profession.[220]

In the eighteenth century the court continued to employ male midwives, the most famous being the Parisian surgeon Nicolas Puzos, who delivered Louis XV's children and was in turn duly ennobled in 1751.[221] As the century wore on, the habit filtered downwards and by the mid-century it was commonplace for the well-to-do in Paris and provincial towns to summon an accoucheur.[222] In response to the growing market, canny surgeons in the capital established specialist courses in midwifery for the benefit of trainee surgeons, which supplemented the course founded at the Paris École de Chirurgie by La Peyronie in 1747.[223] Most were ephemeral, but one or two became permanent fixtures. The

[218] See above, Ch. 4, Sect. E, for the organization of midwifery until the turn of the 18th cent.

[219] The standard accounts of the development of male midwifery are J. Donnison, *Midwives and Medical Men: A History of Inter-Professional Rivalries and Women's Rights* (New York, 1977), esp. ch. 2, and Gélis, *Sage-Femme*, 291–327.

[220] See the biographical notice by Devaux in Quesnay, *Recherches critiques*, 615–16. Mme de Sévigné's family used an accoucheur: see *Lettres de Madame de Sévigné, de sa famille et de ses amis*, ed. M. Monmerque (14 vols.; Paris, 1862), iv. 143.

[221] Puzos had been trained by Clément: see his *éloge* in *Mémoires de l'Académie royale de Chirurgie*, 3 (1757), 121–8, esp. 122.

[222] For male midwifery in the capital in the early 18th cent., see *Johannes Gessners Tagebuch*, 149–57.

[223] La Peyronie founded two courses in midwifery at the Paris École in his will, one for surgeons, the other for trainee midwives: see his *éloge*, *Mémoires de l'Académie royale de Chirurgie*, 2

most important was the school established by François Solayrès de Renhac (1736–72), who had taken the degree of physician-surgeon at Montpellier. Renhac passed his school onto Jean-Louis Baudelocque who was the most famous male midwife in the capital on the eve of the Revolution and had an international reputation through his highly popular obstetrical textbooks, notably the *Principes sur l'art des accouchemens*, first published in 1775.[224]

In the last decades of the Ancien Régime even the lower orders were having their babies delivered by male midwives, and it became possible for surgeons to dedicate all, or a large proportion, of their time to the practice.[225] Pierre Robin of Reims, for instance, in the 1780s seldom delivered less than 200 infants per year; the high point was 1783 when he delivered 235 (see Table 9*a*). As Reims had a population at this date of some 30,000, then Robin personally looked after 15 per cent of the births in the town (assuming a birth-rate of 40 per 1,000).[226] Robin's practice covered the social spectrum. Indeed, the majority of his clients were the wives of artisans: carpenters, tailors, masons, dyers, and so on (see Table 9*b*). In 1775 116 of his 174 patients were charged 9 *livres* or less for his services; 22 paid nothing at all.[227] Although Robin's surviving account-book does not always specify the husband's occupation, it is evident that those who paid under 10 *livres* were always from the *menu peuple*, if the occasional affluent artisan, such as the clockmaker Vuathier or the wigmaker Gonel, was expected to pay more.[228] Robin also delivered the infants of the completely indigent, for he attended births at the Reims Hôtel-Dieu, though never on a regular basis, and presumably only in the cases of difficult presentations. In his private practice the large proportion of his deliveries were perfectly normal and his success rate high. Only 12 out of 183 babies he delivered in 1781 were awkward presentations and only 5 were stillborn.[229] He equally seldom lost a mother, unless the woman was already *in extremis*. Thus on

(1752), p. lviii; the Faculty also had a course for trainee midwives from 1745: see above, Ch. 7, Sect. D, and Ch. 8, Sect. C. It is instructive that no course of obstetrics was found in 1724 when the king established the Paris École de Chirurgie.

[224] There were also private courses in midwifery for trainee physicians—e.g. the course given by Antoine Petit, referred to above, Ch. 8, Sect. C. Whether physicians attended surgeons' courses and vice versa is not known.

[225] Admittedly only 3 of the 192 Paris surgeons in 1789 are identified in the *Almanach Royal* (1789), 628–35 specifically as accoucheurs, compared with 2 oculists, 2 dentists, and 5 hernia doctors: the three do not include Baudelocque.

[226] BM Reims MS 1082, account book 1770–92. We have used this source independently of Jacques Gélis, whose analysis is contained in id., 'La Pratique obstetricale dans la France moderne: Les Carnets du chirurgien-accoucheur Pierre Robin (1770–1797)', *Annales de Bretagne*, 86 (1979), 191–210; and id., 'Un accoucheur rémois au XVIIIe siècle, le chirurgien Pierre Robin (1725–1804)', *Travaux de l'Académie nationale de Reims*, 162 (1983), 136–57.

[227] The wives of clothworkers were usually delivered free of charge.

[228] Gonel paid 12 *livres* on two occasions (1782 and 1783); Vuathier 18 *livres* (1782).

[229] Including 4 of the awkward presentations. In 1774 11 out of 146 were awkward deliveries; in 1775 only 7 out of 178.

17 September 1776 he was summoned at 3.30 a.m. to assist in delivering a woman called Godinot, only to find her dying of smallpox. Her baby, however, was saved, for on the woman's death, Robin performed a successful Caesarean section.[230]

TABLE 9*a*. *The midwifery practice of Pierre Robin of Reims 1770–1797 : number of clients*

Year	Number of Clients	Income (*livres*)
1770	69	943
1771	79	
1772	92	
1773	108	
1774	146	
1775	175	2,057
1776	159	
1777	258	
1778	173	
1779	218	
1780	178	
1781	183	
1782	208	
1783	235	
1784	227	
1785	221	4,570
1786	194	4,085
1787	222	4,630
1788	—	
1789	207	4,075
1790	—	
1791	—	
1792	247	3,879
1793	—	
1794	—	
1795	—	
1796	254	
1797	197	3,998

Source: Robin's account book: BM Reims MS 1082.

The speed with which male midwifery became socially acceptable in eighteenth-century France, as in other parts of Europe, is difficult to explain.[231]

[230] BM Reims MS 1082, *sub anno*, under Robin's observations for the end of the year. Robin gives no indication how many mothers or babies died from post-partum problems.

[231] For the development of the phenomenon in England, see A. Wilson, 'William Hunter and

Given the traditional taboo against the presence of men in the delivery chamber, it is surprising that there was not stronger opposition to the development, especially from the Church. In fact, in France at least, opposition was muted and the advent of the accoucheur did not lead to a vigorous campaign against male

TABLE 9*b*. *The midwifery practice of Pierre Robin of Reims: social and occupational profile of his clients in 1789*

workers	
chiefly textile	52
other textile workers (dyers, hatters, etc.)	9
artisan shopkeepers (bakers, butchers, innkeepers)	16
skilled artisans (shoemakers, masons, tailors, coopers, etc.)	30
agricultural (farmers, millers)	14
domestic servants	3
SUBTOTAL	124
middle class (merchants, clerks, officials)	13
noble	1
unknown	69
TOTAL	207

Source: Robin's account book: BM Reims MS 1082, *sub anno*. About 60 per cent of Robin's clients in 1789 came from the *menu peuple*. We can assume that the vast majority of the unknown clients were well-to-do. Throughout the account book there are very few entries for noble women or the wives of professional men.

mid-wifery by social conservatives in the name of morality and decency. The surgeons' successful intrusion into a traditionally female preserve can partly be attributed to a relentless propaganda campaign. Throughout the century well-to-do ladies, and their husbands, were encouraged to believe that all midwives were ignorant and superstitious, and that their presence at the birth was dangerous to mother and child. Surgeons in contrast would deliver babies safely and with little pain, a particularly important selling-point in the less stoical age of the Enlightenment. Antoine Louis, author of the article 'accoucheur' in the first

the Varieties of Man-Midwifery', in Bynum and Porter (eds.), *William Hunter*. William Hunter was the leading male midwife in London in the second half of the 18th cent.: for his practice, see ibid., esp. the essays in pts. i and ii.

volume of the *Encyclopédie*, was particularly caustic about the capacity of contemporary midwives. It would have been better for women, he insisted, if the species had never existed. Guilty of causing premature births and deformed children, they were dismissed as barbarians, who were not only dangerous but venal. Anxious to show off their supposed expertise to a paying audience, they would announce the imminent conclusion to a difficult birth, then deliberately reverse the normally presented foetus in the mother while the crowd was gathering. 'I would not dare to advance this fact, if I had not been witness to it several times, and if the midwife herself had not had the imprudence to admit it to me, when all the spectators [*les assistans*] had left.'[232]

Yet, the propaganda campaign could not have been sustained with such success indefinitely. Midwives may have been largely ignorant in the first half of the eighteenth century, but a growing number were being given formal instruction in the final decades of the Ancien Régime, ironically often through the initiatives of urban surgeons.[233] Although the majority of rural midwives remained without formal instruction on the eve of the Revolution, the situation was arguably fast improving. What continued to give credence to the claim that the surgeon-midwife was the safer choice in the second half of the century was the popularization of a novel, life-saving obstetrical instrument: forceps.

Before the eighteenth century there was little that could be done to induce the second stage of labour, beyond applying unguents to encourage the babies' expulsion. Women could lie in labour two or three days or even longer in great pain until they were in a state of exhaustion and the baby dead. It was only then that the surgeon was customarily called in and a surgical instrument used to resolve the labour, notably the notorious *crochet* or hook, deployed in the often vain hope of extracting the infant in pieces before the mother expired. The invention of obstetrical forceps revolutionized childbirth, by making the safe extraction of the infant in cases of protracted labour much more likely, and with minimum pain to the mother.[234] The instrument seems to have been invented by the Huguenot Chamberlen family in the seventeenth century, but it does not

[232] *Encyclopédie*, i. 85 (1751). The art. says nothing about the development of male midwifery as such. But the preceding art. 'accouchement' (i. 81–4), also by Louis, is written as if babies were always delivered by surgeons.

[233] See above, Ch. 8, Sect. C, and below, Ch. 12, Sect. B, esp. for the activities of Mme Du Coudray. Louise Bourgeois had bemoaned the ignorance of midwives in the early 17th cent.: see above, Ch. 4, Sect. E.

[234] According to Gélis, *Sage-Femme*, 307–8, surgeons had registered increasing success from the late 17th cent. in dealing with difficult deliveries, and that their success helps to explain why women started summoning male midwives for normal deliveries. Grateful mothers automatically called surgeons to attend their subsequent deliveries and sang the praise of the male midwife to friends. There may be some truth in the argument, but when surgeons were only called in after several days there must have been innumerable instances where even skilful surgeons could have done little to save either mother or baby.

seem to have been known or used by Europe's leading surgeons until the 1730s, when it was popularized by the Paris surgeon Grégoire the Younger.[235] The latter taught its use to a number of surgeons, including the Scot William Smellie (1740–95), who used a perfected version of Grégoire's forceps in his London midwifery practice. Grégoire's forceps were in turn developed by other surgeons, notably by the Parisian André Levret (1703–80), the inventor of an instrument with curved rather than straight sides, which could be used to extract a baby whose head was turned inwards. It was this instrument which Louis puffed in the *Encyclopédie*, while praising the invention generally for its utility.[236]

Forceps were the quintessential Enlightenment tool. Admittedly, their use was not uncontested, for some surgeons preferred a different instrument, the lever, first used in the United Provinces.[237] But it was the forceps that captured the public imagination. Their invention and popularization legitimized the presence of the surgeon in the delivery chamber. Even if they were used infrequently,[238] they were the surgeon's secret; he alone and not the midwife had access to and knowledge of this new life-saving technology.[239] The surgeon, then, was no longer a figure of dread, summoned to pass sentence of death on mother or child, but an angel of mercy whose presence seemed to guarantee that labour would not last for days. Henceforth well-to-do families would have been sure to call a surgeon at the first signs of a complicated delivery, whatever the midwife's views, while the prudent would have avoided any chance of boundary-quarrels between accoucheur and accoucheuse by hiring a surgeon from the beginning.

The surgeons' propaganda campaign and the undoubted technological advances in childbirth that the surgeons pioneered and controlled ensured that the physicians' hostility to their subordinates' boundary-breaking in this instance would be as limited as society's generally. In fact, there seems to have been only one strident medical opponent of male midwifery—the Parisian physician and Jansenist sympathizer Philippe Hecquet—who argued in a work published in

[235] The Chamberlens kept the invention of the instrument a family secret. Grégoire the Younger is to be distinguished from his father Martin Grégoire the Elder. Both gave private courses in midwifery to surgeons: see *Johannes Gessners Tagebuch*, 150–7. For a brief history of the obstetrical forceps, see Gélis, *Sage-Femme*, 347–57.

[236] *Encyclopédie*, vii. 125–7 (1757). Louis says nothing about the history of the instrument. Levret described his new forceps in 1747.

[237] Gélis, *Sage-Femme*, 352–7. In London in the second half of the 18th cent., moreover, some man midwives, notably William Hunter, eschewed the use of any instruments.

[238] Robin in 1774 attended 21 forceps deliveries out of 146; in 1775 he only used forceps 7 times, out of 178 births: BM Reims MS 1082, *sub annis*.

[239] Traditionally only surgeons could use instruments in childbirth and this was one custom the surgeons ensured was maintained. The *Encyclopédie*, vii. 125 emphasized that the instrument required dextrous manipulation by 'un *homme* [our italics] intelligent'.

1708 that the advent of the accoucheur heralded the collapse of public morals. Both the surgeon-midwife and the mother were inevitably compromised, he believed. '[W]hatever one may say, the office of a midwife is constantly scandalous for a man; embarrassing, to say nothing more, for a woman.'[240] Women in confinement should therefore be normally looked after by their own sex. Only one birth in a hundred was complicated, and in such cases a physician should be summoned and not an ignorant surgeon.[241] Surgeons, Hecquet believed, were too blasé about miscarriages. Accoucheurs encouraged women to lead a normal life during pregnancy, often with disastrous consequences, and never warned them about the eternal torment awaiting the aborted foetus.[242] It is unlikely, though, that Hecquet's views were widely shared by many of his colleagues even in the first half of the eighteenth century. Thereafter, although the physicians became more and more interested in controlling midwives and midwifery themselves, there is no sign that they objected to male midwives. Indeed, in 1757 the enlightened physician Antoine Petit actively encouraged surgeon-midwives. Recognizing that there were too many surgeons for the number of surgical cases in the capital, he wished the surgeons would turn their attentions to delivering babies rather than interfering with the treatment of internal diseases.[243]

However, Petit may well have been deluding himself if he believed that by directing the surgeons' attentions elsewhere he would be safeguarding the physicians' terrain. If at first glance, his suggestion makes sense—the occupation of surgeon-midwife could be time-consuming and lucrative[244]—a harder look leads to a less positive conclusion. A surgeon-midwife who looked after a mother during pregnancy and gained her confidence might easily evolve into a family practitioner, offering his client advice on how to rear her children and treating their various maladies. In an age when enlightened physicians were encouraging their colleagues to pay more attention to child and female diseases, the surgeon-midwife was a potential threat to the expansion of the physicians' traditional role, if the reality of the threat is admittedly impossible to judge.[245]

[240] *De l'indécence aux hommes d'accoucher les femmes et de l'obligation aux femmes de nourrir leurs enfans* (Trévoux, 1708), 5.

[241] Clearly, from Robin's experience, Hecquet was optimistic here! See above, p. 611. Wilson, 'William Hunter', 344, claims 4 per cent of 18th-cent. births were difficult.

[242] Hecquet, *Brigandage de la chirurgie*, 148–9. It was only in this second book (from the 1730s) that Hecquet specifically identified the fashionable accoucheur as a surgeon. For a general discussion, see ibid. 79 ff.

[243] 'Discours', 18. For the physicians and midwifery, see above, Ch. 7, Sect. D. Petit could not wait for the moment when women would cease to deliver babies.

[244] Cf. Robin's income from his midwifery practice: given above, Ch. 8, Sect. E.

[245] Unfortunately, we have no examples of surgeon-midwives becoming family practitioners. It is even difficult to know whether a male midwife, such as Robin, provided pre-natal care, or just attended the delivery of the child. It is possible that accoucheurs worked in a team with local *sages-femmes*; in which case mothers did not have to choose between a male or female midwife. We owe

Encouraging rivals to poach on other people's land, therefore, may have seemed a sensible and even enlightened strategy, but it offered the surgeons an entrée into a novel market that the physicians hoped to exploit and control themselves.

F. The Survival of Corporatism

French surgery and surgeons had made great strides in the eighteenth century. The techniques, if not the range, of invasive surgery had been greatly extended and improved, while the crown, in recognition, had consistently favoured the art, elevating surgeons who abandoned barbering to the ranks of notable bourgeois, encouraging the emergence of the classically educated urban surgeon, promoting surgical education and research, and ennobling prominent practitioners. At the same time Paris surgeons had successfully used the printing-press to educate public opinion in the legitimacy of surgery's rise in status and to fashion a new conception of the relationship between surgeons and physicians. As a result, the enlightened physicians' vision of a future where graduate doctors would establish control over the entire field of medical practice, through the instruction and direction of a bevy of subordinate outworkers—surgeons, apothecaries, midwives, veterinary surgeons, and so on—was wishful thinking. Not only did surgeons in the larger towns now consider surgery a liberal art, equal in status to and independent of physic, but they were also expanding their territory and, if not necessarily invading the realm of internal medicine, were certainly including midwifery within their professional province.

Yet, there were clear limits to the extent of surgery's social and technological progress over the century. Although by 1789 most surgeons in towns of any size (10,000+) had definitely shed their barbers' skin and were skilful and eloquent practitioners, able and willing to perform operations seldom if ever attempted in earlier centuries, this was far from being true of their small-town and rural cousins. The evidence from the *cahiers des doléances* and the submissions to the National Assembly's Health Committee suggest that educated and well-to-do Frenchmen still saw the majority of surgeons as ignorant bumpkins with little surgical expertise beyond a knowledge of phlebotomy and resolving fractures and dislocations. And it was surgeons of this stripe—the Jacques Longs of the medical world—who dominated medical practice *tout court* in the countryside.[246] The *cahier* of the nobility of Montreuil-sur-Mer (Picardy) voiced a

this thought to Susan Lawrence. Obviously, if the male midwife's function was limited to attending the birth, then there was less chance of his trespassing on the physicians' territory.

[246] Long, it will be recalled, only performed two serious operations, a Caesarean and an amputation, in seven years: see above, Sect. A. Long, too, it should be emphasized, must have been an exceptional figure among rural surgeons in that he kept a journal, and not a mere account book, of his activities.

common perception when it declared that 'the ignorance of country surgeons costs the state more citizens per year than ten battles would cause it to lose'.[247] Enlightened physicians, therefore, who railed against the calibre of rural surgeons on the eve of the Revolution were not totally guilty of *parti pris*.[248] The new surgery was the monopoly of an élite. What had effectively happened in the course of the eighteenth century was the emergence of a hard core of skilful, inventive, socially prestigious, and lettered surgeons, perhaps no more than 2,000 in total and predominantly resident in large towns,[249] who demanded recognition as the physicians' equals.[250] The large majority of surgeons still remained socially and intellectually the physicians' subordinates. It is wrong, then, to think of one surgical community in 1789, albeit divided into three branches according to the provisions of the 1730 *règlement*.[251] Really, there were two distinct communities. It was as if the sixteenth- and seventeenth-century division between the Paris surgeons of Saint-Côme and the Paris community of barber-surgeons had been replicated nationally.[252]

There were clear limits too to the extent to which even the rise in status and skill of surgeons in the large towns destabilized the traditional corporative hierarchy. Educated surgeons may have wished to gain acceptance as the physicians'

[247] Cited in L. Liard, *L'Enseignement supérieur en France, 1789–1889* (2 vols.; Paris, 1888–94), i. 82.

[248] Admittedly, the physician-reformers were particularly concerned about the rural surgeons' ignorance of physic, which the latter perforce had to practise. In this regard, in Tissot's opinion, they were on a par with other rural irregulars, and thus formed one of the groups to whom he directed his self-help manual: see Samuel-Auguste-David Tissot, *Avis au peuple sur sa santé* (2nd rev. edn., 2 vols. in 1; Lyons, 1763), 26. For this text, see above, Ch. 7, Sect. D. The solution, as we saw, was to provide future rural surgeons with a proper training as general practitioners: see above, Ch. 7, Sect. D. The same rhetoric of ignorance appeared in the reform plan presented by Vicq d'Azyr to the National Assembly in 1790: see Félix Vicq d'Azyr, 'Nouveau Plan de constitution pour la médecine en France', *Histoire et Mémoires de la Société Royale de Médecine: Années 1787–1788*, 9 (1790), 4–9 and 66. Vicq's proposals are considered below, Conclusion, Sect. C.

[249] Even in the big cities not all surgeons had to be MAs by 1789. This was not the case at Troyes, for instance, for this was one of the demands in the company's *cahier*: see J. P. Goubert and D. Lorillot (eds.), *1789, Le Corps médical et le changement: Les Cahiers des doléances des médecins, chirurgiens et apothicaires* (Toulouse, 1984), 95.

[250] The figure of 2,000 is derived from the number of surgeons known to have been active in towns of over 10,000 in the 6 northern *généralités* in 1789. See J.-P. Goubert, 'The Extent of Medical Practice in France around 1780', *Journal of Social History*, 10 (1976–7), esp. 416. Obviously, from what has been said about the background of surgeons who sent observations to the Academy of Surgery, some skilful and inventive 18th-cent. surgeons did live in smaller towns.

[251] For this, see above, Ch. 8, Sect. B.

[252] We thus disagree with Toby Gelfand, who has argued that the surgeons in the 18th cent. formed a single 'monarchical' (i.e. hierarchically organized) profession: see his 'A "Monarchical Profession" in the Old Régime: Surgeons, Ordinary Practitioners, and Medical Professionalization in Eighteenth-Century France', in G. L. Geison (ed.), *Professions and the French State, 1700–1900* (Philadelphia, 1984), 149–80. Of course, not all Paris barber-surgeons had been pedestrian practitioners: Ambroise Paré had originally been of their number.

equals, but they were not anti-corporatist. They still envisaged medicine as a corporatively organized occupation, divided into its three traditional branches. As we saw, in the late 1740s even Quesnay, a strong opponent of corporatism in his later physiocratic years, essentially supported the continued existence of two separate corporative bodies of surgeons and physicians in Paris with their own distinctive spheres of influence. Publicly at least the surgical élite did not support a medical free-for-all. City surgeons neither wanted to destroy the corporative organization of medicine nor its traditional tripartite division: they merely wanted to redefine the relationship between city physicians and surgeons.

In consequence, urban, educated surgeons were always as jealous as urban physicians of their corporative rights. All innovations which threatened those privileges were usually vigorously contested, such as the crown's decision to allow an increasing number of long-serving hospital assistant surgeons automatic admission to their local surgical corps.[253] Similarly, urban surgeons viewed with suspicion the growing popularity of the new Montpellier degree of surgical medicine. When holders of the degree tried to practise surgery in substantial towns they could soon come under attack. This was the fate, for instance, of one Germillac, who set himself up in Périgueux in 1772. Previously, he had practised both medicine and surgery in the small town of Coutras without hindrance, but, on moving to Périgueux, he immediately encountered difficulties: the local surgeons demanded that he become a master of the Périgueux corporation and the lieutenant of the king's premier surgeon even insisted that he first serve his time as a surgical pupil. The same fate awaited one Bourgeret who began to practise in Sisteron in 1787. Anxious to set himself up as a surgeon, male midwife, and inoculator because (in his opinion) it was more lucrative than practising physic, he was thwarted by the Sisteron community of surgeons which challenged his right to operate. Both physician-surgeons appealed to their Alma Mater for support, or at least clarification as to what their rights to practise surgery were. The upshot of their appeals, however, remains unknown.[254]

Surgeons in large towns thus continued to maintain the social institutions of Ancien Régime France, however much they deployed the Enlightenment language of utility and courted public opinion in justifying their social pretensions. Even the Paris surgeons, who led the campaign to elevate the status of surgery, were ardent champions of their corporative rights. As much as the Paris physicians they resented licensed interlopers, and as late as 1786 they were

[253] Many assistant surgeons in hospitals were officially accorded the title of *garçon gagnant maîtrise*, which was often only acquired after a competitive *concours*: see below, Ch. 11, Sect. D.

[254] BFMM AFMM F 57 and E 72, unnumbered series of letters 1772 and 1787: letters dated 28 Mar. 1772 and 17 June 1787. From 1772 trainee surgeons had ceased to be apprentices and were called *élèves*: see above, Ch. 8, Sect. B.

challenging the right of many so-called court surgeons to practise surgery in the capital. According to a list of officeholders drawn up by the Paris community the royal household boasted 123 surgeons (sharing 143 offices). As the size of the Paris corps at this date was some 190, the court contingent effectively inflated the number of licensed surgeons in the capital by 60 per cent, with obvious implications for the income of the community's members.[255] Not surprisingly, the Paris surgeons attempted to limit the influx by claiming that only fifty-seven of the court surgeons had the potential right to practise in the capital, and only twenty-six could actually do so because they had become officially affiliated to the Paris corporation.[256]

There were still signs of life, then, in the corporative medical community on the eve of the Revolution: many surgeons as well as physicians who benefited from corporative rights still expected their legal privileges to be upheld by the courts. Nevertheless, the corporative community which had been erected in the course of the sixteenth and seventeenth centuries was a highly unstable entity. The emergence of an élite of skilful, well-educated surgeons put paid to the physicians' hopes of using the corporative community to enhance their own control of medical practice, and made a nonsense of the traditional hierarchical organization of medicine. Clearly, the resultant tensions between physicians and surgeons, which operated on so many different levels (individual as well as corporative, ideological as well as economic) would prevent any chance of the two groups forging an alliance in defence of the corporative community, if its rights were ever questioned by the state. The community's weakness, however, did not only stem from intercorporative wrangling. As we saw in Chapter 8, incorporated physicians and surgeons in the larger towns occupied a highly privileged position within the wider community of graduate doctors and master-surgeons. As a result, most physicians and many surgeons no longer shared the economic and corporative interests of the leading members of their respective communities, however much the small-town physicians at least may have embraced the same Enlightened medical ideology as their more fortunate, incorporated colleagues.[257] It is difficult to believe, therefore, that within this wider community of trained practitioners there was any longer a common *esprit de corps*. But the corporative medical community was not simply imploding from internal divisions. It was also collapsing through the growing competitive pressure exerted by unlicensed and untrained medical practitioners. The

[255] Only a small proportion of the 123 were actually members of the Paris corporation.

[256] AN O' 612, nos. 27–31 and 44, esp. no. 44, document (printed) entitled 'État des chirurgiens de la maison du roi, de la famille royale et de quelques corps militaires y attachés. Pour servir de renseignements dans l'instance pendant au conseil de S(a) M(ajesté), entre eux et le collège de chirurgie de Paris.' The memo was drawn up by the Paris surgeons.

[257] See above, Ch. 8, Sect. D.

Enlightened physicians dreamed of a future where every Frenchman and woman would be looked after by a trained practitioner and where the medical penumbra would no longer exist. In fact, as Chapter 10 will show, this too was an unrealizable dream on the eve of the Revolution. Far from the quack and the charlatan disappearing in the Age of the Enlightenment, the unlicensed healer had gained a new lease of life. Indeed, so successful were many eighteenth-century charlatans that an increasing number of trained practitioners, even members of the most prestigious medical corporations, were being enticed to imitate their example and break the long-standing norms of medical ethics.

10

Medical Entrepreneurialism in the Enlightenment

A. The New Medical Entrepreneur

The last years of the seventeenth and the early decades of the eighteenth century witnessed not only the beginnings of major shifts in medical philosophy and corporative organization, but also changes in the social context in which medicine was practised. In particular this period witnessed the early stages of the emergence of new forms of medical entrepreneurialism, which spanned the traditional divide between orthodox practitioners and 'empirics' or 'charlatans'. Instructive here are the careers of three figures lodged on the fringes of the corporative medical community: Jean-Adrien Helvétius, Auguste Belloste, and Nicholas Blégny.

The rise to fame of Jean-Adrien Helvétius in the 1680s was the basis of a striking personal and dynastic fortune.[1] It was grounded in his 'discovery' and promotion of the drug ipecacuanha, whose properties against fevers (notably dysentery) assured it, and him, lasting fame. In fact, ipecacuanha was not a new drug: it had been known since the 1630s at least, and had been peddled by Parisian apothecaries in the 1670s (albeit in fatally high concentrations which had discouraged usage). It was Helvétius who had realized the drug's potential by experimenting, at first illegally, with its effects on inmates in a major Parisian hospital. He then worked with a Parisian merchant to corner the market in the drug's supply before in 1686 launching a poster-campaign to publicize the drug in the capital. A 'miracle' cure which the drug effected at court—on the dauphin—induced the monarch to purchase the 'secret' in the public interest for the not-inconsiderable sum of 1,000 gold louis.

The story might have ended there. In the same decade, Versailles had witnessed a host of similar episodes. In 1680 alone, the physician Philippe de la Verdure received 12,000 *livres* from the court in return for the recipe of his remedy for fevers, and Provençal priest Trimond de Cabrières, *prieur* de Saint-Geniez-de-Malgoirez, received state reward for his remedy for haemorrhoids. Most

[1] L. Lafond, *La Dynastie des Helvétius: Les Remèdes du Roi* (Paris, 1926). Cf. above, Ch. 4, Sect. A.

notably of all perhaps, the Englishman Tabor (or Talbor) was awarded a lump sum of 48,000 *livres*, a pension of 2,000 *livres*, and the title of *chevalier* for a discovery immediately revealed to be merely a tincture based on cinchona (a 'secret' whose properties in the cure of fevers had actually been known about since 1638).[2]

Figures like Chevalier Talbor dropped swiftly from sight. That Helvétius did not, exemplified the nostrum that with proprietary remedies the personality of the promoter and the patronage he enjoyed were at least as important as the product. Successful treatment of the duchesse de Chaulnes in the earlier 1680s had won Helvétius backing from the Colbert clan of which she formed part, and this was a useful position from which he negotiated a monopoly in supplying the drug to the royal army. He subsequently persuaded the government to allow him to compose an array of popular remedies (including quinquina) into medicine chests sent out to rural areas.[3] He further consolidated his position: first, through court position—starting in 1701 he was appointed physician to the duc d'Orléans (the future Regent) and followed an upwardly spiralling *cursus honorum*; second, through administrative service, beginning with establishment as military hospitals inspector from 1708; and, third, through commercial publishing—his *Traité des maladies les plus fréquentes et des remèdes propres à les guérir* (1703) went through frequent new editions, and shamelessly plugged his own remedies, as did his rather flamboyant *Recueil des méthodes de M. Helvétius* (1715). Though despised as a charlatan by the Paris Faculty, despite the fact that he was in fact the son of a massively conventional Dutch physician, who had been first physician to the prince of Orange, the duly ennobled Helvétius was for Saint-Simon 'a good and upright man, a man of integrity'. By the time of his death in 1727 he had established his son as a high-flying court physician and seen the *remèdes d'Helvétius* become a staple ingredient in state health provision, a role which they retained until the Revolution.[4]

Helvétius represented a new form of medical entrepreneur, and one destined for great importance over the next century. Even in the last years of Louis XIV, he was far from alone. At a lowlier level, the fortunes of the Belloste medical

[2] These exx. are cited in M. Bouvet, 'Les Pensions accordées avant 1728 aux fabricants de remèdes secrets', *Pharmacie française*, 28 (1924), 1 ff. Cf. F. Lebrun, 'Médecine et empiriques à la cour de Louis XIV', *Histoire Économie et Société*, 3 (1984), 560–1. See too *Remède du Prieur de Cabrières pour les descentes donné au public par la bonté du Roy* (Versailles, 1686), at BN Collection Clairambault 1054. Talbor's secret recipe was published by Nicolas Blégny (see below, n. 7) in 1682.

[3] BN MS FR 6801. For the Colbert clan, cf. D. Dessert and J. L. Journet, 'Le Lobby Colbert: Un royaume ou une affaire de famille?', *Annales ESC* 32 (1977), 1303–35.

[4] See below, Ch. 12, Sect. A, for the *boîtes d'Helvétius*, or *boîtes de remèdes*. For Saint-Simon on Helvétius, see id., *Mémoires*, ed. G. Truc (7 vols.; Paris, 1953–61) i. 841 f.; D. Van Der Cruysse, *La Mort dans les 'Mémoires' de Saint-Simon: Clio au jardin de Thanatos* (Paris, 1981), 206.

dynasty and the proprietary drug associated with its name provide another exemplary case of successful medical entrepreneurialism.[5] 'Belloste pills' (*pilules de Belloste*) for venereal and associated ailments were a pretty unremarkable mercurial concoction much like many others peddled at the time. Their originator, Auguste Belloste (?1650–1730), was a Parisian surgeon who served in numerous military campaigns on the Italian front in his youth where he was able to perfect his expertise and win a sufficiently high renown to be appointed surgeon to the duchesse de Savoie in 1696. His *Chirurgien d'hôpital* which appeared in the same year provided a general treatment of military surgery as well as extensive coverage for his successes with venereal diseases. Reissued in five new editions up to 1735, translated into Dutch, German, Italian, Spanish, Portuguese, and English, and complemented by the appearance in 1725 of a *Suite du Chirurgien d'hôpital*, these works assured the fame of the Belloste pills, and enabled him, like Helvétius, to found a medical dynasty: the manufacturing and marketing of the pills passed to his widow, son, and grandson, the last of whom became a physician attached to the household of the comte d'Artois in the 1780s. The recipe of the pills would eventually be purchased by the French state and become a standard officinal drug prescribed for venereal disease into the twentieth century.

There was much about the careers of the Helvétius and Belloste dynasties which marks them out as exemplars of a new medical entrepreneurialism. Until the end of the Ancien Régime, very few medical practitioners could venture on a successful career outside the gridiron of the corporative medical community without some kind of political patronage. The basis of the new medical entrepreneurialism was the grafting onto this age-old stem of two new shoots. One was entry under advantageous circumstances to the substantial market for medical services now offered by the standing army, the navy, and the state apparatus. The other was an appeal to public taste, which entrepreneurs could supply and endeavour to shape.

In the late seventeenth century there was no more assiduous a courtier of public taste in medical matters than Nicholas Blégny.[6] A provincial boy, Blégny had paid his way through training in Paris as an apothecary and surgeon by selling insecticide and matches, and seems to have made a fortune manufacturing

[5] M. Bouvet, 'Les Pilules de Belloste', *Bulletin des sciences pharmaceutiques*, 35 (1928); id., 'Quelques documents sur les remèdes secrets', *Séances et Travaux de la Société française d'histoire de la pharmacie* (1943), 13 ff.; and [Belloste], *Instruction sur le bon usage des pilules de M. Belloste* (n.p., n.d.).

[6] No good biography exists. Besides his works, see in particular the account of his life in P. Delaunay, *La Vie médicale aux XVIe, XVIIe et XVIIIe siècles* (Paris, 1935). His upward ascent through the royal medical household can be followed in the registers of authorizations under the Prévôté de l'Hôtel du Roi, at AN V3 193–5. Blégny's career is in some areas very close to that of the subject of F. Loux's fine biography, *Pierre-Martin de la Martinière: Un médecin au XVIIe siècle* (Paris, 1988), from which we have derived much inspiration.

ILLUSTRATION 18. Nicolas de Blégny. Surgeon, then physician, courtier, journalist, and ardent self-publicist, Blégny represented a type of entrepreneurial medical man, as adept at creating demand for health services as at servicing it, which would become more common towards the end of the eighteenth century.

a new style of herniary truss, before purchasing surgical posts within the royal medical household from the late 1670s. From this position, and under the dual patronage of La Reynie, *lieutenant général de police*, and premier physician D'Aquin, he went from strength to strength, taking a medical degree in Caen, securing a post as *médecin du Roi*, and simultaneously launching himself into a whirlwind of self-promotion. He established an anatomical amphitheatre, a chemical laboratory for manufacturing medicines, a private infirmary, and an 'academy' for debating medical and scientific issues, and poured forth a stream of publications on current medical issues. A pamphlet in 1682 revealed the 'secret' of the Chevalier Talbor, and writings on two widely spread health conditions, venereal disease and hernias, kept him in the public eye, as did his work on the medicinal value of the fashionable new commodities of tea, coffee, and chocolate.[7] Though short-lived, his *Nouvelles découvertes sur toutes les parties de la médecine* (1679–81) count as a first in French medical journalism, and

[7] *Le Remède anglais, pour la guérison des fièvres* (Paris, 1682); *L'Art de guérir les hernies ou descentes de toutes espèces dans les deux sexes* (Paris, 1693); and *L'Art de guérir les maladies vénériennes* (3rd edn., The Hague, 1685); *Le Bon Usage du thé, du caffé et du chocolat pour la préservation et guérison des maladies* (1687).

spawned a number of imitators,[8] while his *Livre commode des adresses de la ville de Paris*, published in 1692, a kind of trade directory-cum-advertising sheet which detailed the extent of medical practice of all sorts to be found in the city was a pioneer of medical advertising. The *Livre commode* defined the empirically grounded medicine which he and others were offering as medicine 'which is practised by individuals whose studies have not been sufficiently regulated to reach the standard of a degree, but which is based on experiments with medicinal recipes'. Temporarily shielded by the Chambre royale, Blégny inevitably fell foul of the Paris Medical Faculty. He had already in 1686 had to cool his heels for a while in the Bastille, and in 1693, for reasons which are obscure, but clearly related to the hostility his multifarious energies had provoked, he was imprisoned by royal *lettre de cachet*. Released in 1701, he spent the rest of his life away from Paris, in Italy and the provinces.

Blégny's career highlights the development of a medical market-place in the capital—a point confirmed by the account of Paris in 1698 given by the English traveller Martin Lister (?1638–1712). The latter was strongly impressed by the apparent eclipse of physicians by irregular practitioners: 'Apothecaries, Barbers, Women and Monks'. He witnessed the notorious Frère Jacques perform lithotomies; marvelled at wall-posters for medical remedies—'Quack Bills Printed in great Uncial Letters'; recorded how 'little Chimical Toys, the Bijous of Quacks [were] mightily in request'; noted the state purchase of secret remedies; and deplored how 'Quacks ... do thrive vastly into great Riches ... by treating privately these Calamities' (sc. venereal diseases)'.[9]

The English traveller detected a demand for health services and medical information which seems to have been largely unsuspected by the corporative medical community as a whole, but which Blégny and his sort had been swift to exploit. Self-promotion, commercial publishing, and a zest for publicity formed the basis for a new type of medical career—especially if it could be combined with at least the trappings of therapeutic success. Public demand for health provision was, moreover, set to grow. Changes in *mentalité* in the Enlightenment, as we have seen, and a new boom in health maintenance with its roots in the expanding ranks of the middling classes, were beginning to expand the volume and the insistence of demand for medical goods and services.[10] Improved com-

[8] For the *Nouvelles*, see J. Sgard (ed.), *Dictionnaire des journaux, 1600–1789* (2 vols.; Oxford, 1991), no. 1022. For imitators, see ibid., nos. 670, 671, 949, 994.

[9] *A Journey to Paris in the Year 1698* (London, 1699): for medicine see pp. 236–45. Though this is a superb documentary source, we should beware of according this traveller's judgements on the dominance of quack medicine too much credence. Lister was more familiar with the commercial world of medicine in late 17th-cent. London, for which see H. J. Cook, *The Decline of the Old Medical Régime in Stuart London* (Ithaca, NY, 1986). For Frère Jacques, see above, pp. 556–8, and below, p. 748.

[10] See above, Ch. 6, esp. Sects. B, C.

munications and patterns of distribution would, moreover, play very much into the hands of new medical entrepreneurs.

But in 1700 this was still largely in the future. As the Blégny case showed, there were severe limitations on medical success undertaken by the commercial route. The open market was still in the late seventeenth century a less efficacious precondition of economic success than access to privileged state markets like the court and the army exploited by the likes of Belloste and Helvétius. The medical entrepreneur was exposed and vulnerable on the market-place if he could not command protection. This remained true, moreover, for much of the eighteenth century. State service and court connection continued to have a slight lead over, and to remain linked to, the open market as a career investment for this new kind of commercial medicine. Even the most freebooting medical entrepreneurs were best advised to keep one foot in the camp of state patronage.

B. The Regulation of Remedies and the Making of 'Quack Street'

Right through to the end of the Ancien Régime, the royal court remained a key source of legal status and medical legitimacy, and the leading figures of the royal medical household a consistent port of call for medical entrepreneurs. The practice of the state purchasing a proprietary medicine from its owner or inventor—usually after adjudication by the premier physician—was one means by which this power was wielded. The *elixir de Garrus*, for example, widely used throughout the century for (as its own publicity put it) 'fortifying Nature, conserving, and re-establishing health' was purchased from the widow of the eponymous inventor in 1723, who was accorded letters patent allowing her sole enjoyment of the production and distribution of the drug. This authorization was extended on the widow's death to her heirs.[11] In 1730 the so-called drops of General de la Motte (*gouttes du général de la Mothe* (or *Motte*)), named after a Transylvanian artillery general who had retired to France, received the same treatment, and the monopoly was continued by the general's widow after 1742. Demoiselle Guy, daughter of an apothecary who had served Charles II of England, and sole owner of her father's secret remedy for a chest medicine, received letters patent in 1740, which were renewed in 1746–7, to maintain her position in the face of alleged counterfeiters. By mid-century too, the *sachets*

[11] *Elixir de Garrus* (n.p., n.d.): handbill, BN Te-15-408. The state's purchase of the drug overrode the fiasco associated with its use in the terminal illness of the duchesse de Berry in 1719: see Saint-Simon, *Mémoires*, vi. 368 f. Joseph Garus, or Garrus, was a Montpellier doctor, who died in 1723: AN O167 (dossier for a pension for his widow). Cf. C. H. Fialon, 'Quelques prospectus charlatanesques du XVIIIe siècle', *Bulletin de la Société d'histoire de la pharmacie*, 32 (1921). Fialon noted that the elixir was still being used in the French countryside at the time he was writing.

anti-apoplectiques of druggist Guillaume Arnoult were becoming one of the best publicized of proprietary remedies, advertised in the *Mémoires de Trevoux*, promoted by the Cardinal de Polignac in the Académie française, cited in the *Encyclopédie*, plugged by Voltaire in his novella *Zadig*, and receiving royal letters patent in 1748.[12]

In theory, all such proprietary remedies retailed in Paris were supposed to have the formal endorsement of the Paris Medical Faculty, but in practice, state patronage of a remedy ensured immunity from faculty harassment. As earlier, royal protection in Paris and the provinces was frequently channelled through the agency of the Prévôté de l'Hôtel du Roi which held the power to police the businesses of *artisans suivant la cour*. What had been nugatory privileges restricted to a handful of artisans following the itinerant Renaissance court had swollen under Louis XIII and Louis XIV into a sizeable cottage industry, involving several hundred artisans and petty entrepreneurs of all sorts.[13] The Prévôté de l'Hôtel gave routine protection for the manufacturing and distribution of remedies, including mineral waters. In 1698, for example, Guillaume Danet was given the franchise to sell a number of well-known mineral waters both at court and in Paris. This, it was stated, was within the remit of the surveillance over mineral waters and spas enjoyed by premier physician Fagon.[14]

Under Louis XV, changes in the organization of medical policing of mineral waters and proprietary medicines consolidated the place of the Prévôté de l'Hôtel as a bridgehead for commercial medicine. In 1728 royal edicts entrusted the task of authorization to a special royal commission, headed by the king's premier physician and comprising five physicians, five surgeons, and two apothecaries. An edict of 17 March 1731 further clarified working procedures: warrants (*brevets*) for the manufacturing and distribution of remedies were to be issued by the premier physician, following consultation with the Commission, and these were to be renewable every three years. The Commission was to work closely with the powerful *lieutenant-général de police* in Paris and with provincial authorities to prohibit the sale of all unauthorized drugs. There were further, minor changes to the personnel of this Commission in 1752 and 1754, and then again in 1772 after which it came to be called (from where it met) the Louvre Commission, and was no longer dominated by the premier physician. Its func-

[12] *Elixir d'or et Elixir blanc du Général de La Motte* (Paris, 1749). For Dlle Guy, cf. Bouvet, 'Quelques documents', 13 ff. Cf. J. de Drouais, 'Un remède au XVIIIe siècle: Le Sachet anti-apoplectique d'Arnoult', *Bulletin de la Société de l'histoire de Paris et de l'Île-de-France*, 114–15 (1986–7), 413–29.

[13] See above, Ch. 4, Sect. C.

[14] AN V3 195 (3 Mar. 1698). We draw heavily on the *Prévôté* registers of authorizations, AN V3 193–5. See too above, Chs. 3, Sect. B, and 4, Sect. B, for the premier physician's rights over mineral-water spas.

tions were from 1778 to be taken over by the newly created Royal Society of Medicine.[15]

What seemed at face value an exercise in bureaucratic controls and state medical policing turned out to be something very different. Despite the formal trappings of state regulation, the period from the 1730s down to 1772 was characterized by virtual anarchy in the authorization and distribution of proprietary remedies. Crucial in this was the role of the premier physician, who worked sometimes on his own authority, sometimes through the Prévôté de l'Hôtel. The distinguished cardiologist Jean-Baptiste Sénac, who served as premier physician between 1752 and 1770, seems to have viewed the system as a means of personal enrichment as much as a scientific vetting procedure, and the regulation of remedies came to be seen as a façade cloaking the premier physician's greed. Rumour had it that Sénac devolved the responsibility entirely to his wife, who made 100,000 *livres* a year from it. Other medical practitioners on the Commission found the arrangements so irregular and shameful that they abstained from taking part altogether. Sénac seems also to have approached his role as superintendent of mineral waters with much the same venal glee: the rights of the premier physician as *surintendant général des bains et fontaines médicinales du royaume*, established in 1605, had been reaffirmed in 1709, and Sénac developed a sophisticated system of spa 'intendants' who paid him exploitation rights: these figures were normally physicians who were given a monopoly of treating patients without an attendant practitioner in tow. He also enjoyed a cut on every bottle of mineral water brought into the capital.[16]

Sénac's mercenary, easy-go approach to the licensing of proprietary remedies produced a highly complex situation. In Paris by mid-century doctors of the Medical Faculty were surrounded by a luxuriant medical penumbra of licensed and semi-licensed figures engaged in medical provision. The semi-encyclopaedic *État de la médecine* published in 1776 by two Parisian physicians listed the royal medical household in full, a hundred or so Paris physicians, nearly two hundred surgeons, 88 apothecaries (plus 22 widow-apothecaries), and large numbers of other specialists (36 dentists, 6 opticians, 14 herniotomists, 304 midwives, a choice selection of 127 herbalists), plus simply dozens

[15] M. Bouvet, 'Les Commissions de contrôle des spécialités pharmaceutiques au XVIIIe siècle', *Bulletin de la Société d'histoire de la pharmacie*, 35 (1922), 88–93. See too below, Ch. 12, Sect. D.

[16] *Observations sur la Requête présenté au Roi par la faculté de médecine de Paris contre la Commission Royale de Médecine* (n.p., 1773), *passim*; *Observations impartiales sur la Commission Royale de Médecine* (n.p., n.d.); P. Delaunay, *Le Monde médical parisien au XVIIIe siècle* (Paris, 1906), 300; ASRM 115. For the development and policing of the mineral-water industry, see too L. W. B. Brockliss, 'The Development of the Spa in Seventeenth-Century France' in R. S. Porter (ed.), *The Medical History of Waters and Spas* (*Medical History*, suppl.10; London, 1990); and E. H. Guitard, *Le Prestigieux Passé des eaux minérales: Histoire du thermalisme et de l'hydrologie des origines à 1950* (Paris, 1951).

of authorized drugs and remedies on sale within the capital under no fewer than five systems of authorization.[17] The premier physician's Louvre Commission was responsible for authorizing twenty-two individuals to retail their proprietary medicines. However, the Faculty of Medicine had retained its secular right to authorize—its approval had been extended to seven substances, including Baumier's skin lotion and Jacquet's antimonial preparation (and the latter had also been buttressed by a licence from the Prévôté de l'Hôtel).[18] The Paris *lieutenant-général de police* had also authorized twenty-two individuals, though their remedies were supposed to be only external applications and relatively anodyne substances such as Neuman's eau-de-Cologne, the *onguent doyen* produced by Viborel, Roulleau's depilatory cream or the *suc de réglisse blanc* manufactured by the nuns of the Abbaye-au-Bois convent. The Royal Academy of Sciences had extended its approval to four 'secrets', including Collin's *rouge végétal* and the *eau vulnéraire de Comère* produced in Montpellier.[19] There were eight individuals who still enjoyed rights by royal letters patent, such as the widow of General de la Motte and the famous drops. The authors of the directory also listed a dozen remedies and preparations either regularly used albeit seemingly without authorization or else supplied from abroad—Le Brun and Obry, spicer-druggists situated on the Rue Dauphine (and thus conveniently close to the Pont-Neuf, the home of charlatans), stocked numerous English proprietary remedies. There were, finally, a list of substances 'relative to health' including tortoises for medicinal soups, leeches, hair-dyes, perfumes, and the like.

The *État de Médecine* thus reveals the motley existence in Paris of a kind of Quack Street of practitioners on the margins of the orthodox medical community, and firmly plugged into what was clearly a buoyant and expanding market for medical goods and services. To these, moreover, could be added the numerous physicians, surgeons, apothecaries, spicers, druggists, herbalists, botanists, dentists, herniotomists, midwives, and quacks of various sorts practising without any authorization at all. The Parisian police chief had a special commissioner with responsibility for, as he put it, 'la police des empiriques'. This individual, when reviewing his files in 1778, found no fewer than 1,746

[17] [Cézan, Lefebvre de Saint-Ildephont], *État de médecine, chirurgie et pharmacie en Europe pour l'année 1776* (Paris, 1776). The list of proprietary drugs and preparations is on pp. 204–21. It should be compared with our figures in Table 8*f*. Much criticized, the compendium was followed the next year by [Jacques de Horne, Pierre La Servolle, and Jean Goulin], *État de la médecine, chirurgie et pharmacie en Europe et principalement en France pour l'année 1777* (Paris, 1777).

[18] AN V3 198 (3 Sept. 1764, 3 Sept. 1767).

[19] Cf. Pierre Duchans, *Discours sur la découverte, les propriétés et l'usage de l'eau vulnéraire de Comère de Montpellier* (London, 1774). This also had the backing of the Prévôté de l'Hôtel: AN V3 198 (12 July 1765), which allowed the drug's proprietor, the botanist Duchans, to have distribution points.

names which he had inscribed since 1762.[20] Although, he admitted, some of these individuals might well have left Paris, their place had probably been taken by others, so that this figure was a pretty accurate 'guesstimate' of the number of such individuals. Thus while the number of authorized Parisian physicians stagnated, individuals practising on the margins of or beyond the pale of the law proliferated wildly.

While the Paris Medical Faculty blithely continued to label as a charlatan any practitioner who had not received its blessing, the sociology of Parisian medical practice within the orthodox medical community was thus being transformed. This development was to some degree a continuation of seventeenth-century struggles between the Faculty and 'outsiders'.[21] One of the epicentres of those struggles—the issue of the right of medical practitioners from the royal medical household to practise in Paris without a Faculty degree—continued to be a locus of dispute, especially in the light of the growing number of practitioners invoking this privilege. In 1720, when the number of practising Paris doctors hovered at around the ninety mark, there had been only seventeen physicians in the royal medical household, some of whom were Parisian graduates anyway, while one or two would have been doubtless too busy at Versailles to think about practising in Paris.[22] Still, the Faculty preferred outsiders being obliged to take a Paris degree, as did the Montpellier *érudit* Jean Astruc in 1743. By 1789, in contrast, the size of the royal medical household had swollen dramatically: as well as some ninety-six surgeons, there were no fewer than eighty-eight physicians (while only 151 Paris doctors were in practice). The number of court physicians had more than quintupled while the size of the Paris medical corps had not even doubled, so that the ratio among physicians permitted to practise in Paris had grown from 1 court physician to every 4 or 5 Paris doctors in 1720 to 1 to every 2 on the eve of the French Revolution.

Paris-trained doctors had thus increasingly to compete for the supply of medical services not only with surgeons and the unlicensed or semi-licensed denizens of Quack Street but also with trained physicians infiltrating the Parisian market from a niche within the royal medical household. Although the

[20] ASRM 107 d.1. Cf. [Nicolas-Toussaint Le Moyne, *dit*] Des Essarts, *Dictionnaire universel de police* (6 vols.; Paris, 1776), ii. 473.

[21] See above, Ch. 5, Sect. E.

[22] For the royal medical household, see C. Jones, 'The *Médecins du Roi* at the End of the *Ancien Régime* and in the French Revolution', in V. Nutton (ed.), *Medicine at the Courts of Europe 1500–1837* (London, 1990). For numbers and personnel involved in particular years, see the *Almanach royal* (location of the list can be found through the vol. index). For their legal position, see Jean Verdier, *La Jurisprudence de la médecine en France* (2 vols.; Alençon, 1762–3), ii. 58 ff.; and P. J. J. G. Guyot, *Traité des droits, fonctions, franchises, exemptions, privilèges annexés en France à chaque dignité* (4 vols., Paris, 1786–8), i. 537 ff. For numbers practising in Paris legally, see Table 8*f*.

growth in the number of court physicians owed something to royal demographics—the coming-of-age of the brothers of the future Louis XVI in the 1770s provoked a sudden blip—this was not the main reason for the growth. A place at court which gave its holder entrée into the Parisian market was the key issue: a court post was a sound career investment for physicians who found the costliness and longevity of the Paris medical course simply too demanding a means of accessing wealthy clients.

The number of court office-holders who ever got near the body of the monarch was small. Only about one-eighth of the court physicians in 1789 even lived at Versailles; most of the royal medical household inhabited the fashionable neighbourhoods of Paris where the wealthiest clientele was to be found, leaving the poorer faubourgs bereft of trained medical aid.[23] Paris, then, was the eye of the storm. The Edict of Marly in 1707 had stipulated that practitioners attached to the person of the royal family should have received a medical degree, but this proved difficult to implement. In 1743, for example, the Faculty went to law in order to prevent the enormously powerful first surgeon La Peyronie from practising medicine in Paris on the grounds that he had acquired a paper degree in medicine from the sleepy faculty in Reims: they lost their case. They had no greater success in the 1770s when they attempted to persuade the Paris Parlement to stop Ernon and Macmahoney, two recent appointments on the fringes of the medical household who lacked a Paris degree, from practising in Paris. In 1778 they failed to prevent the administration of the Hôpital Général from appointing Gaulard, a non-Parisian doctor who held court appointment as *médecin des écuries du roi*, despite the fact that such hospital appointments had always been monopolized by Paris graduates.[24]

In a medical world increasingly open to enterprise, the Paris Faculty was being overtaken by events and looking increasingly hidebound. The Faculty's finger, though resolutely in the dike, was failing to keep back the floods. They could, and did, point out how greater openness to external practitioners seemed to be linked to the advance of charlatanism within the capital, and their lumping-together of trained physicians and unlicensed hacks had, as we shall see, some justification. Yet the public often showed a strong liking for the charlatanism excoriated by the Faculty. Nor was this necessarily as ignorant and misguided a

[23] Germain Pichaut de la Martinière, *Mémoire présenté au Roi* (1749), cited in T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Ideas and Institutions in the Eighteenth Century* (London, 1980), 206 n. 72. Cf. C. Maillé-Virole, 'La Naissance d'un personnage: Le Médecin parisien à la fin de l'Ancien Régime' in J. P. Goubert (ed.), *La Médicalisation de la société française, 1770–1830* (*Historical Reflections/Réflexions historiques*, 9; Waterloo, Ont., 1982), 156. The *Almanach royal* gives addresses.

[24] Verdier, *Jurisprudence de la médecine*, ii. 82; Guyot, *Traité des droits*, i. 547; *Commentaires de la faculté de médecine de Paris* (*1777 à 1786*), ed. G. Steinheil (2 vols.; Paris, 1903), ii. 15, 72, 77–8, *passim*; Delaunay, *Monde médical parisien*, 78.

choice as the latter claimed. The system of court appointment might have allowed some pretty rum characters purchase on the Parisian market: it also permitted the wealthier classes of the capital to enjoy the services of men of outstanding intellectual calibre who lacked the formality of a Paris medical degree, or who had been unable to penetrate the core of the corporative medical community. Of the physicians in the court in 1789 whose training it is possible to ascertain, over half were graduates of Montpellier, the liveliest and most interesting of the provincial faculties, progenitor of Bordeu and Barthez, and storm-centre of vitalist doctrines.[25] The court appointment system permitted Parisians to be infused with something of the intellectual vitality of foreign and provincial faculties and encouraged an atmosphere of doctrinal heterodoxy within the capital.

The pros and the cons of this semi-regulated field for medical practice were seen in striking relief in regard to treatments available for venereal disease, a field which was one of the most booming subsectors of the developing medical marketplace and in which could be seen the major advances which commercialism was making even within the very heart of the orthodox medical community.[26] Venereal disease was frequently beyond the therapeutic reach of physicians, who in the past had neglected it, perhaps because its most obvious symptoms were external skin lesions, which by convention lay within the province of the surgeons.[27] The sick might resort to spiritual ministrations, though even in the seventeenth century some had deemed this inappropriate: Guy Patin had scoffed at the thought of Job being patron saint of a 'new disease' such as syphilis.[28] The progress of dechristianization in the Enlightenment made recourse to the cult of saints less convincing, less attractive, and arguably less appropriate for such a shaming condition, at least among the élite. In addition, the spread of syphilis through the military to the major garrison towns of the country and, through the system of wet-nursing for foundlings, into the furthest recesses of the French countryside made this a health problem of enormous scope for medical entrepreneurship. Into this gap stepped divers surgeons, apothecaries, and quacks of every stripe.[29]

The encyclopaedic study of venereal disease by the great Montpellier *érudit* Jean Astruc in 1736 was in a way an attempt to reclaim the subject for the

[25] Jones, '*Médecins du Roi*', 228. Cf. above, Ch. 7.

[26] The best intro. to this field is Delaunay, *Monde médical parisien*, ch. 7, 234 ff.

[27] See above, Ch. 7, Sect. D.

[28] A. Franklin, *La Vie privée d'autrefois: Les Médecins* (Paris, 1892), 243 n. 2.

[29] The diffusion of venereal disease through wet-nursing practices brought what was often seen as a quintessentially urban and élite disease to the most remote rural areas, which were seedbeds of wet-nurses. The problem is frequently glimpsed in the archives of hospitals with responsibility for wet-nursing foundlings and orphans. See e.g. AD Hérault: Archives de l'Hôpital Général de Montpellier (antérieures à 1790) E1–29, *passim*.

physicians.[30] By listing all the treatments of the disease since its apparent appearance in the 1490s, by determining on the basis of the available evidence that the disease had originated in the New World, and by adjudicating claims among those who had claimed to offer hopes of cure, Astruc put the disease firmly on the map for his physician confrères. Straight away, however, he ran into trouble. Astruc generally endorsed the method of mercurial frictions for treatment for venereal disease, opposing notably the oral ingestion of mercury as dangerous and ineffective. The Parisian surgeon Roger Dibon (d. 1777) had used mercurial pills with some success since the 1720s when, following experiments performed at the Invalides under ministerial surveillance, he had been awarded a state pension of 1,000 *livres*. Astruc's attack on Dibon brought the latter to rise to the occasion. He offered to conduct experiments on patients before Astruc's very eyes, and was indeed able to persuade him that his treatment could be effective. The surgeon's success was well received by Paris surgeons generally, then at the height of their struggle against the Medical Faculty, and entered the mythology of this corporative struggle as a triumph for the experimental approach espoused by the former against the physicians' 'library medicine'. Astruc, one anonymous pamphlet claimed, 'talks of venereal disease ... like a brain function he seems never to have dissected'.[31]

Dibon became one of the most accredited purveyors of venereal treatment in Paris in the middle decades of the century.[32] From the late 1750s, however, his place at the centre of the venereology market was overtaken by the Dutch entrepreneur Keyser (who seemingly lacked any medical training whatever).[33] Opinion remained divided on the medical benefits of the latter's *dragées anti-vénériennes*, but one thing was clear: he was a shrewd operator. Critical to his success was his ability to persuade the war ministry, following trials performed in the Paris hospitals, that his pills offered the best, but also one of the most economical, treatments available. He also secured a warrant for their manufacture and distribution from first physician Sénac (at this stage, this was

[30] *De morbis venereis libri sex* (Paris, 1736)—trans. almost immediately into Fr., Eng. and other European languages.

[31] This was physician and *philosophe* Julien Offray de La Mettrie, in his anonymous *Ouvrage de Penelope, ou Machiavel en médecine* (2 vols.; Berlin, 1748–50), i. 179. On his support for the surgeons versus the physicians, see K. Wellman, *La Mettrie: Medicine, Philosophy and Enlightenment* (Durham, NC, 1992), esp. ch. 2. For the physicians v. surgeons struggle, see above, Ch. 9, Sect. D.

[32] See esp. *Lettre de M. Dibon ... à M. ... docteur en médecine* (Paris, 1743). This, and associated pamphlets on the debate, are located in *Recueil de pièces et mémoires pour les maîtres es l'art et science de chirurgie et pour la faculté de médecine...*((42 vols.; Philadelphia, 1760) BN 8-T18–120), xii, which recapitulates much of the polemic between physicians and surgeons between 1743 and 1751.

[33] This general dispute can be followed in the in-8° series, *Recueil de pièces et mémoires pour les maîtres es l'art et science de chirurgie*, cited above, vols. v–vii.

little more than a palm-greasing job). In 1755 he mobilized ministerial support first for the establishment of a special new military hospital, the Hôpital des Gardes-Françaises for research and development on the *dragées*, and second to restrict the treatment of venereal disease in all military hospitals throughout France to his drugs, of which he was sole supplier. This was a massive market, which Keyser extended into the civilian sphere by a major publicity campaign: certificates of effective treatment were endlessly churned out, handbills and pamphlets run off in droves, a network of provincial outlets organized, poems in praise of the *dragées* commissioned, and success stories were skilfully infiltrated into the *Mercure de France* and the provincial press (which was also provided with knocking copy directed against rivals). Keyser, military inspector and physician Jean Colombier later ruefully noted, 'earned a lot of money, cured few people and yet, despite his poor success and the recriminations of physicians, people swore only by him'.[34]

Keyser's market leadership was gradually lost as from the 1760s new types of venereal treatment appeared, each trailing certificates of glory, and presented as the latest scientific progress. Fad followed fad. Keyser had to compete with Mollée's *quintessence mercurielle*, which was based on the *pommade mercurielle* of Torrès and which could be used as drops in tea or tisanes; Charbonnière's mercurial fumigations; Plenck's *mercure gommeux*; the *emplâtres mercurielles* of Lalouette (d. 1792); the *sirop mercuriel* of physician Isaac Bellet (d. 1778); the *lavements anti-vénériennes* of surgeon Thomas Royer (cruelly dubbed 'the enema man' ('l'homme aux lavements') by his enemies); the *bougies* and *sondes anti-vénériennes* of André; Guillaume Lefebvre de Saint-Ildephont's *chocolat aphrodisiaque*; Goderneau's *poudre*; the *sublimé corrosif* of Joseph-Jacques Gardane (1736–86); and much else besides.[35] A particular concern of entrepreneurs in this field was the discovery of a non-mercurial treatment which could work

[34] *Médecine militaire, ou Traité des maladies tant internes qu'externes auxquelles les militaires sont exposés dans leurs positions de paix et de guerre* (Paris, 1778), 449. Cf. *Recueil de pièces* (BN 8–T18–120), v–vi; and [Roger Dibon], *Mémoire … contre la lettre anonyme d'un médecin de Paris inséré dans le Journal encyclopédique du mois de février …* (1755). Also, see below, pp. 695–6.

[35] For a general intro. to a highly dynamic field, see, besides Delaunay, *Monde médical parisien*, ch. 7; C. Quétel, *History of Syphilis* (Oxford, 1990), 88 ff. and E. M. Bénabou, *La Prostitution et la police des mœurs au XVIIIe siècle* (Paris, 1987), 407 ff. For Mollée, id., *Méthode de traiter les maladies vénériennes au moyen de la quintessence* (Paris, 1753); [Roger Dibon], *Mémoire concernant différens remèdes pour les maladies vénériennes* (Paris, 1764); André, *Manière de faire usage des bougies ou sondes antivénériennes, médicamenteuses et chirurgicales …* (n.p., n.d.); Thomas Royer, *Instruction pour l'administration des lavemens anti-vénériennes* (Paris, 1765); Joseph-Jacques Gardane, *Mémoire sur l'insuffisance et le danger des lavements anti-vénériennes* (London, 1770) (whence the expression 'L'Homme aux Lavements'); and Guillaume Lefebvre de Saint-Il[dephont], *Le Médecin de soi-même, ou Méthode simple et aisée pour guérir les maladies vénériennes* (Paris, 1775). Royer was also successful in seeking *brevets du Roi* through the Prévôté de l'Hôtel: AN V3 198 (14 Oct. 1765, 10 Feb. 1772).

without the unpleasant side-effects of mercury-based treatment (notably excessive salivation). Velnos's *remède anti-vénérien végétal* in the early 1760s was soon joined by similar concoctions prepared by Nicole, Duvicq, and Pastel.[36] The most successful in this field were the botanist Agirony, who followed up a warrant with the first physician, support from the Paris Faculty and royal letters patent in 1770, and the firm of Pierre Boyveau (1750–1812) and Denis Laffecteur (d. 1821) who also secured royal authorization for the *rob Laffecteur* which went on to become the longest-lasting and most notorious of all such treatments.[37]

Physicians from the heart of the orthodox medical community were drawn increasingly into this lucrative and modish trade. Young practitioners in particular, who blenched at the difficulty of setting up in Paris, could maybe even exaggerate its import: the Lyonnais Pierre-Joseph Willermoz, training in Montpellier from the late 1750s, believed that only by becoming a 'charlatan' could he get established in Paris: two treatments a year for venereal disease would secure him a steady income.[38] In sporadic efforts to reassert a grip that it was only too evidently losing, the Faculty indulged in occasional ritualistic scapegoating of the more outrageous characters within its ranks. In 1774 it formally banned the *Manuel anti-syphilitique* which one of its members, Louis-Alexandre de Cézan, had published, expelling him in 1776. It did the same in 1773 against Guilbert de Préval, who had tested his *prophylactique anti-vénérienne* by anointing himself with the substance before having sex with a hideously diseased public prostitute (allegedly in the company of the ducs de Chaulnes and de Chartres). Despite the bans—maybe because of them?—over 2,000 copies of Cézan's brochure were sold, while Préval claimed to have cured 2,700 soldiers in Paris and at court.[39]

The complicity of the Paris Medical Faculty with Quack Street made it all the more difficult for the former to speak with any conviction and authority when it did try to draw a line between licit and illicit medicine. The grounds for Faculty authority seemed to be slipping beyond the corporative grasp. Though venereal disease was perhaps the most visible sign of this process, it was becoming much more widespread for practitioners from within the corporative medical community to commit themselves, far more daringly than they would have dreamt of doing in the past, to involvement with proprietary remedies and novel treat-

[36] Delaunay, *Monde médical parisien*, 251–2; *Recueil de pièces* (BN 8-T18–120), vi, *passim*.

[37] For Agirony, see the handbill in 'Recueil de pièces', vii. For Laffecteur, see below, Ch. 12, Sect. E.

[38] BM Lyons, MS 5525 bis: letter to his brother, 22 Dec. 1760. Cf. ibid., 7 Oct. 1756.

[39] C. C. Gillispie, *Science and Polity in France at the End of the Old Régime* (Princeton, 1980), 258–60; *Mémoire pour la Faculté de Médecine de Paris contre M. Alleaume doyen et Cézan docteur* (1776).

ments, backed up on occasion by the blare of publicity. Even the solidly established were attracted to commercial gain. The worthy Faculty luminaries Antoine Petit and Jean-Stanislas Mittié (1727–95) for example, were arch-promoters of Velnos syrup. Bouvart, ennobled for his services to humanity, pillar of Faculty rectitude, scourge of 'speculators in health', who was so attached to Faculty ethics that he refused to treat the princesse de Condé in the company of a doctor from outside Paris, even Bouvart had made a practice of using Bellet's *sirop mercuriel*.[40] Similarly, the drops of General de la Motte were widely used by everyone and indeed had been part of the treatment of Louis XV at the hands of premier physician Chicoyneau and premier surgeon La Peyronie when he had fallen ill at the siege of Metz in 1744. Rumour also had it that court surgeon (and future physiocrat) Quesnay owed his promotion to an escapade in which Louis XV's excessive nocturnal exertions with Madame de Pompadour had led to a *crise* from which the monarch had only been pulled round with these notorious drops.[41]

The provision and supply of mineral waters was a further area of health provision in which practitioners well ensconced within the corporative medical community were making a commercial reflex. The Enlightenment saw the mineral-water trade pass from ecclesiastics, who had seen in balneology a sub-branch of the miraculous, into secular hands. Some ecclesiastics had been rather entrepreneurial: the Cordeliers at Alise-Sainte-Reine ran massive publicity campaigns for their spa, and in the first decade of the eighteenth century were said to be shipping 20,000 bottles of their waters to Paris. Yet the eighteenth century saw such groupings eclipsed. By the eve of the Revolution, counterfeiters had completely undermined the position of the Cordeliers, for example, who were responsible for only 3,000 of the 50,000 bottles consumed in the city.[42] The incorporation of mineral waters into the arsenal of commercial medicines was a triumph—as was so much else—for better communications and distribution. Travellers to take the waters at Alise-Sainte-Reine in the 1630s had suffered highway-robbery, death from bandits, and even being eaten by wolves. Now, better and safer roads stimulated travel. Many semi-inaccessible spas in the Pyrenees were opened up by improved communications, often fostered by enthusiastic provincial intendants and by the ministry of war, which utilized

[40] M. A. J. B. M. Guénet, *Éloge historique de Michel-Philippe Bouvart* (Paris, 1787), 65. Cf. *Lettre de M. D'Eslon ... à M. Philip* (The Hague, 1782), 67; ASRM 107 d.1; and AN V3 198 (15 July 1765 and 12 July 1768—the latter with a testimonial from Petit).

[41] Bouvet, 'Commissions de contrôle', 89. *Lettre de M. Dibon* lists nearly 50 proprietary medicines of all sorts which the author claimed were currently used by Parisian doctors. Cf. *Lettre de M. D'Eslon ... à M. Philip*, 67. Louis XV sent 20 cases of La Motte drops to the pope following his recovery in 1744: Delaunay, *Monde médical parisien*, 304. See ibid. 224 for the Quesnay episode.

[42] M. Bolotte, *Alise-Sainte-Reine aux XVIIe et XVIIIe siècles* (Dijon, 1970), 23 ff., 74, 77.

spas for convalescing soldiers.[43] On the civilian side, spa waters dissolved social distinctions among the élite, and the sites became the locus of a kind of cross-class sociability which made them honorary outposts of the bourgeois public sphere.[44]

The possibilities for enrichment by the medical and service staff involved with the trade in waters were appreciable: Montpellier-trained physician Théophile de Bordeu pulled out all the stops at court, notably *vis-à-vis* the mercenary Sénac, in order to secure for his father and brother, solid Béarnais physicians both, the inspectorate of local spas, which offered substantial earnings.[45] Local spa supervisors were notoriously mercenary: the intendant at Balaruc in Languedoc, it was said in the 1770s, 'is less concerned with the health of the sick than with a preoccupation to take their money'. He was held to be accelerating throughput at the baths so remorselessly that patients were leaving sicker than when they arrived. Formerly an agricultural labourer, he had become the wealthiest individual in his village.[46] Physicians both worked hand in glove with such figures at the local level, and became involved with the growing bottled-water trade which took off in the Enlightenment, from an extremely low level in 1700. Bordeu combined local patriotism, family fidelity, and empirical therapeutics in stalwartly recommending the Pyrenean *eaux de Barèges*. After 1732 a firm headed by Alleaume and Delage was accorded the monopoly over sales within Paris, and they still held control over the trade in 1760, when more than a dozen different waters were available within the capital from as far afield as the Pyrenees and the Mediterranean coast (see Table 10*a*).[47]

The sale of *orviétan*—that most quintessentially charlatanesque of remedies—provides a further, cogent example of how far the Faculty had become immired in the empirical swamp. Since the times of Descombes and Contugi, a practice had developed whereby the holder of the privilege to manufacture the

[43] Guitard, *Prestigieux Passé*, 235; J. C. Devos, 'L'Hôpital militaire de Barèges (Hautes-Pyrénées) du début du XVIIIe siècle à la fin du Premier Empire', *Actes du 97e Congrès National des Sociétés Savantes (Nantes 1972): Section d'histoire moderne et contemporaine* (Paris, 1977), 105 ff.

[44] Cf. A. Franklin, *La Vie privée d'autrefois: Les Médicaments* (Paris, 1891), 262 (citing Mme de Montpensier in 1656 ('des gens de tous les pays et toutes les professions')).

[45] This campaign forms a fascinating leitmotif in Théophile de Bordeu, *Correspondance*, ed. M. Fletcher (4 vols.; Pau, 1977–9), esp. vol. i. For Sénac, see above, pp. 629–30.

[46] de Genssane, *Histoire naturelle de la province de Languedoc: Partie minéralogique et géoponique* (5 vols.; Montpellier, 1776–9), i. 254; AD Hérault, Archives hospitalières de l'Hôpital-Général de Montpellier (antérieures à 1790) G1; AD Hérault G 1408.

[47] Brockliss, 'Development of the Spa', 40; P. Muller, 'Les Eaux minérales en France à la fin du XVIIIe siècle', Mémoire de Maîtrise, University of Paris-I, 1975, and id. (as P. Cosma-Muller), 'Entre science et commerce: Les Eaux minérales à la fin de l'Ancien-Régime', in Goubert (ed.), *Médicalisation de la société française*. Jacques-Louis Alleaume was a spicer, whose son Jacques-Louis became dean of the Paris medical faculty.

TABLE 10a. *List of mineral waters publicly available in Paris, 1777*

Type of water	Quantity (*pintes*)	Price (*livres/sols*)
Thermal waters		
Balaruc	4	9
Lamothe (Dauphiné)	4	8
Bourbonne-les-Bains	1	1/10
Vichy	1	1
Chatel-Guyon	1	1/10
Sulphurous waters		
Barèges	1	2/8
Bagnère & Luchon	1	2/8
Cauteretz	1	2/8
Bones (Béarn)	1	2/8
Bilasay (Poitou)	1	2/8
Plombières	1	2
Cold mineral waters		
Sedlitz	3[a]	5/5
Seydschutz	3[a]	5/10
Contrexéville	1	1/10
Sainte-Reine	1	–/15
Seltz	1	5
Pougues	1	1/10
Saint-Mion (Auvergne)	1	1/10
Langeac	1	1/10
Bussang (Pays des Vosges)	1	1/10
Spa	1	2
Vals	4	9
Forges	1	–/15
Cransac	1	2/8
Passy	1	–/6

Source: *Gazette de santé*, 16 Jan. 1777. List headed 'Eaux minérales qu'on trouve en tout tems à Paris, au Bureau du Sieur Arnaud, seul privilégié, Rue d'Orléans, Saint-Honoré'. For comparative lists from 1760 and 1787 see A. Franklin, *La Vie privée d'autrefois: Les Médicaments* (Paris, 1891), 181 ff.

[a] Measurements in *chopines*, not *pintes*.

drug sold the right to retail it throughout France to a number of *opérateurs*, itinerant hawkers or provincially based salesmen. The eighteenth century saw this system being offered increased legal protection, as *opérateurs* came to reinforce their position by registering with the Prévôté de Hôtel du Roi. This meant that purveyors of the drug who were obstructed in their sale of the drug at local level—by police authorities, municipalities, medical colleges, or whatever—could escape scot-free by obliging litigants to have recourse to that particular

chamber—a process too time-consuming, complex, and expensive for most to bother with. The medical protection which the *orviétan*-seller was afforded by the Prévôté de l'Hôtel was doubled at mid-century, moreover; first, by the fact that the surveillance of production and retailing fell into the hands of the Paris physician Charles Dionis (1710–76), grandson of the great surgeon of the reign of Louis XIV, who in 1741 secured the privilege of the Contugi dynasty to license *orviétan*-sellers; and, second, by the direct involvement of premier physician Jean Sénac in the trade. Some kind of rivalry appears to have developed in the 1760s between Sénac and Dionis, who both appointed *inspecteurs généraux des opérateurs* to ensure that no counterfeiters got in on the *orviétan* act. By 1776 Jean Grécy, *chirurgien opérateur*—presumably the son of the figure of the same name who in 1752, while 'officier de santé du Roi de Portugal, médecin de Son Eminence l'Evêque prince de Liège' likewise served as *inspecteur général des opérateurs du royaume*—had this matter of quality control under his command.[48]

Expectations notwithstanding, the *orviétan*-seller consequently probably had better security at the height of the Enlightenment than at any other time before. A combination of the premier physician and a member of the Faculty was responsible for filling the highways and byways of France with pedlars of *orviétan*, and Dionis seems even to have stooped to himself erecting a theatre on which his children promoted his goods.[49] The registers of the Prévôté de l'Hôtel confirm the vitality of the *orviétan* trade which resulted, as well as its deep enracination within the structures of the orthodox medical community. Though the trade dropped off from the late 1770s—presumably as a result of pressure from the Louvre Commission, then the Royal Society of Medicine—several dozen franchises a year on average were being awarded to individuals for the sale of the drug in the 1760s and 1770s and the figure was even larger if one included licences for the sale of related proprietary drugs (especially antidotes and remedies for venereal disease) (see Fig. 10*a*).

The recipients of licences to license *orviétan* and other drugs under the approval of the Prévôté de l'Hôtel were a motley crew, drawn, as far as we can

[48] For the father, see Archives de la Charité de Lyon G 287, as cited in A. Steyert and F. Rolle, *Inventaire sommaire des archives hospitalières antérieures à 1790. Ville de Lyon: la Charité ou Aumône générale* (5 vols.; Lyons, 1874–1908), ii. 1349 f. For the son, see AN V3 198 (20 June and 2 July 1776, and 16 Oct. and 6 Nov. 1780). It is difficult to follow the competitiveness between Dionis and Sénac in any detail, but the registers of the Prévôté de l'Hôtel suggest a good deal of rivalry in appointment to inspectorates.

[49] The Dionis deal is described in Verdier, *Jurisprudence de la médecine*, i. 149 ff. See too C. S. Le Paulmier, *L'Orviétan: Histoire d'une famille de charlatans du Pont-Neuf aux XVIIe et XVIIIe siècles* (Paris, 1893), and above, Ch. 4, Sects. A and B. For Dionis's children on stage in Lausanne in 1761 see E. Olivier, *Médecins et santé dans le pays de Vaud au XVIIIe siècle (1675–1798)* (2 vols.; Lausanne, 1939), ii. 426.

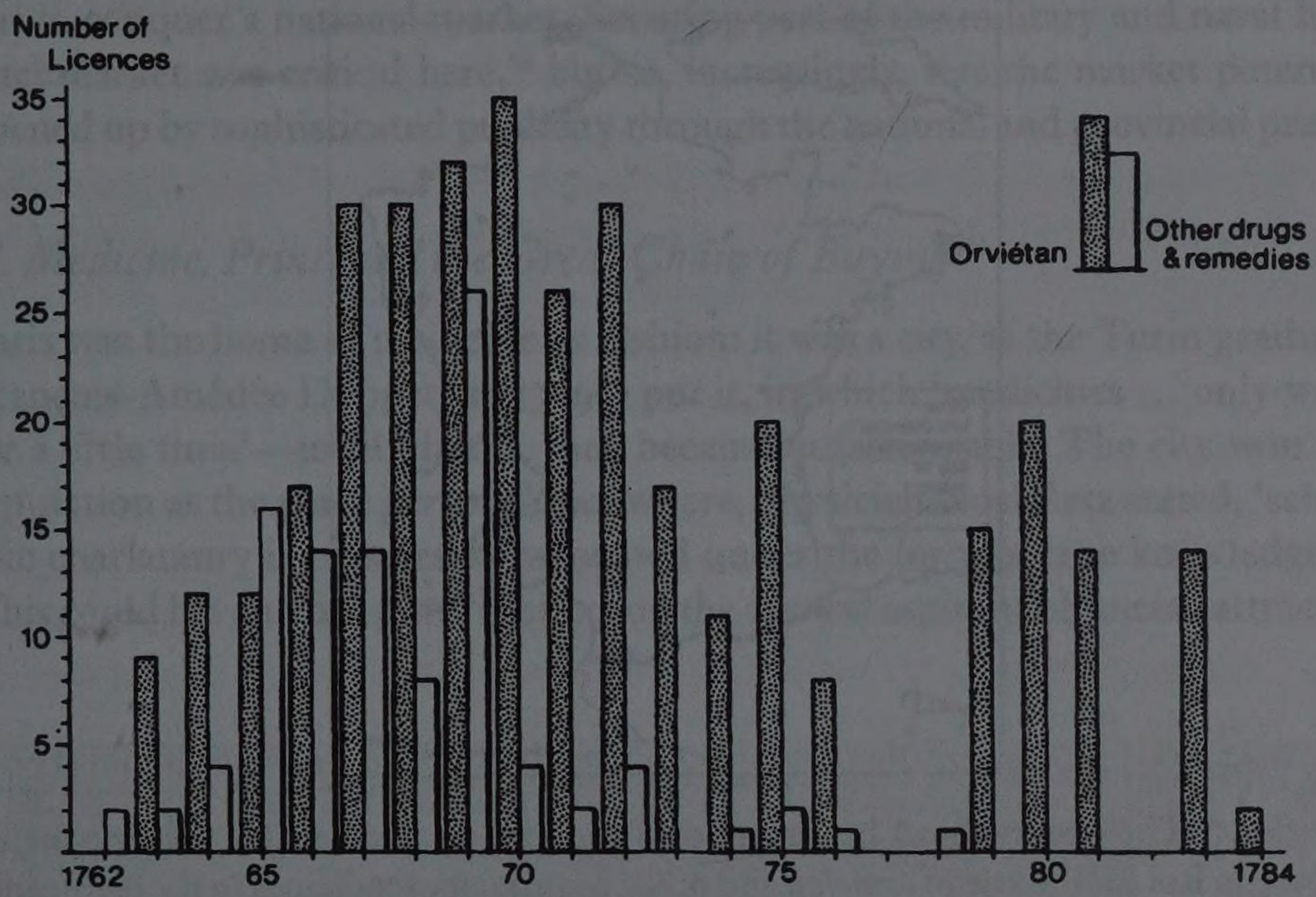


FIGURE 10*a*. Licences awarded for the sale of *orviétan* and other proprietary medicines by the Prévôté de l'Hôtel du Roi

Source: AN V3 197–9.

tell, from throughout France, and with a particularly healthy contingent from Mediterranean and Alpine areas (see Map 10*a*).[50] The structure of the business looked fairly healthy too. Nearly half seem to have been less than 40 years old: salesmen were in the prime rather than the evening of their lives.[51] *Orviétan*-salesmen were far from a crowd of ageing has-beens, but came from a variety of backgrounds. The old title of *opérateur* was still in use, but decreasingly so. The title tended to be dropped or combined with another: *opérateur et dentiste*, for example, or *chirurgien et opérateur*. The other denominations tended to form part of the classic repertoire of travelling experts, with a smattering of more new-fangled titles: thus dentists and oculists were legion (surgical training might be mentioned to boot), chemists (*chimistes*) and botanists present in substantial numbers, while there was also a smattering of herniotomists, apothecaries, accoucheurs, and herbalists. The Prévôté registers recorded a small number too of female practitioners: some widows of established practitioners or *opérateurs*, one *opératrice*, one midwife, plus a number of others of indeterminate

[50] Of 76 cases about whom we know place of origin, 50 were from France (broadly: 22 from the Midi, 15 from the north, 7 from the east, and 6 from the west) and 26 from abroad (19 of whom were from the Italian peninsula, and 5 from Switzerland).

[51] Of 47 whose age we have, 22 were less than 40, 15 between 40 and 49, and 10 over 50.

MAP 10*a*. The geographical background of individuals licensed by the Prévôté de l'Hôtel du Roi for the sale of *orviétan* and other proprietary medicines in the eighteenth century

Source: AN V3 192–8

background.[52] In general, the line demarcating medical core from penumbra was most noticeable in its breach. Among the surgeons, a good number mentioned prior training and achievements: Pierre Fay, for example, was *chirurgien dentiste botaniste de l'Université de Leyde*; Pierre Bertrand Linguet, *chirurgien du Prince Electeur de Trèves*; and so on.[53] There were physicians here too who, if not of the highest class, still reflected the growing indeterminacy of the old division between orthodox and popular medicine: of the ten or so names of physician we have, most had graduated from Italian universities, but others, such as Jean-Baptiste Ravel, from the Vivarais, and Marel (or Morel) de l'Isle, *médecin agregé de la faculté de médecine de Montpellier*, were more apparently mainstream figures.[54]

The *orviétan* trade—like the businesses of sundry venereologists and the business connections between physicians and producers of proprietary medicines—testified to the importance of Paris (along with Versailles, of course) as a major market-place in its own right. In addition, it demonstrated that the city was an excellent launching-pad for entrepreneurs—in medicine as in other domains—

[52] Marguerite Ruggery, *opératrice* (8 July 1782) and Philippine Méraux de Galleraux, 'sage-femme' (21 May 1766), both retailed *orviétan*, as did 4 other women. The dozen or so others sold remedies of different sorts: *eau cosmétique*, e.g. (Dame Mustel: 9 Apr. 1765), *baume oriental* (Dlle Blondel, 22 July 1767), *liqueur minéral* (Dame Chantrelle, 22 July 1769). All exx. from AN V3 198.

[53] For Fay, ibid. (9 July 1772); for Linguet ibid. (17 Sept. 1783).

[54] Ibid. (13 July 1776, 26 Jan. 1780).

out to conquer a national market. Securing part of the military and naval hospital market was critical here,[55] but so, increasingly, was the market potential opened up by sophisticated publicity through the national and provincial press.

C. *Medicine, Print, and the Great Chain of Buying*[56]

Paris was the home of medicine as fashion: it was a city, as the Turin graduate François-Amédée Doppet (1753–99) put it, in which 'medicines ... only work for a little time'—until, that is, they became unfashionable. The city won the reputation as the place *par excellence* where, physician Noel Retz stated, 'scientific charlatanry is ceaselessly presented under the form of true knowledge'.[57] This could have an off-putting effect on the earnest aspirant physician attracted

ILLUSTRATION 19. 'Le Grand Thomas', eighteenth century. 'Pearl of charlatans', Jean Thomas, or 'le Grand Thomas', was a regular fixture in his colourfully decorated cart with its molar themes on the Paris Pont-Neuf for over three decades.

[55] See below, Ch. 11, Sect. C.

[56] For this phrase, and the arguments associated with it, see C. Jones, 'The Great Chain of Buying: Medical Advertisement, the Bourgeois Public Sphere and the Origins of the French Revolution', *American Historical Review*, 101 (1996), 13–40.

[57] [François-Amédée, later 'Pervenche'] Doppet, *Le Médecin philosophe* (Paris, 1787), 11; [N. Retz], *Nouvelles littéraires et critiques de médecine ... par un Étudiant en médecine* (Amsterdam, 1786).

to the city by its medical illuminati. Paris, remarked in 1730 the young Montpellier-trained physician Boissier de Sauvages, who had hoped to perfect his scientific education in the city, was 'a dog of a place', where everything was 'a chaos and a perpetual hurly-burly'. In contrast to the Languedocian city, according to Théophile de Bordeu, Paris was an environment in which 'money, rouge, braggadacio, and ladies' favours are all that is required of a physician'.[58]

Paris's Pont-Neuf continued, moreover, to function, as it had since the time of Rabelais, as a prime site of an oral culture of street-theatre and medical quackery, whose sphere of influence was determined by general notoriety and loudness of voice. On this traditional repair of charlatan and huckster, figures such as *Le Grand Thomas*, self-proclaimed 'hero dentist' and denizen of the bridge from the second to the sixth decade of the century, still practised their ways, as if preserved in aspic from a bygone age. An authorized dentist with a surgical certificate, heaped with testimonials for his tooth-pulling (he also specialized in syphilis cures), he set up, on his pitch next to the famous statue of Henry IV, a kind of richly decorated wagon-theatre from whose stage, wearing a scarlet tunic with gold trimmings and a tricorn hat bedecked with peacock feathers and with a sabre at his side, he exercised his stentorian tones.[59]

Contemporaries were prone to contrast Paris, 'le rendezvous des charlatans',[60] the home of the legendary figures of oral culture like *Le Grand Thomas* with the more sedate, uncommercial provinces. The common people, sighed a physician from deepest rural Bourbonnais, 'will always prefer a local healer [*maige*] to a physician'. 'We see here', he continued, 'all kinds of individuals—women of distinction, nuns, even hangmen—making dupes of the locals and sacrificing hosts of people.'[61] The author of these lines was quite correct in registering the continued presence of large numbers of local healers, whose hold over rural populations would last well into the nineteenth century.[62] Yet when he sententiously concluded 'we naturally like what resembles us, and we are loth to listen to an individual we don't understand', he was missing the point. For what was striking about the place of medicine in the rural world in the eighteenth cen-

[58] Correspondence between Boissier de Sauvages and the Nîmes-based physician Baux fils, BM Nîmes MS 414 (1730); Bordeu, *Correspondance*, i. 65.

[59] A. Chevalier, 'Un charlatan au XVIIIe siècle: Le Grand Thomas', *Mémoires de la Société de l'histoire de Paris et de l'Île-de-France*, 7 (1880), 61–78. Cf. Louis Coquelet, *Le Triomphe de la charlatanerie, dédié au Grand T. ...* (Paris, 1730).

[60] The phrase comes from the pamphlet *Mémoire pour Louis Charbonnier, écuyer, ci-devant Premier Huissier du parlement d'Aix contre le Sr Astruc médecin* (n.p., n.d.), 8.

[61] Barilhon, a physician, from Chambon en Combraille, 5 Mar. 1779: ASRM 199 d.7.

[62] See esp. M. Ramsey, *Professional and Popular Medicine in France, 1770–1830: The Social World of Medical Practice* (Cambridge, 1988); J. Devlin, *The Superstitious Mind: French Peasants and the Supernatural in the Nineteenth Century* (London, 1987). Ramsey is excellent on itinerant travellers, and derives much of his material, as we do, from the archives of the Société royale de Médecine.

tury was less the continued presence of local healers and wise women than the penetration of the rural milieu by large numbers of itinerant practitioners stressing difference from—rather than similarity to—local populations, and displaying a characteristic *mélange* of show-business techniques, academic jargon, and commercial salesmanship. The eighteenth-century rural world was perhaps more plugged into mainstream developments in medical ideas and organization than nineteenth-century folklorists and traditionalists would allow us to imagine.

In Alsace, for example, one Engleberme, who called himself a 'physionomiste royal', was denounced to the authorities. He had appeared

> laced with gold and wearing a decoration like the Cross of Malta, and in a carriage pulled by two horses. He exhibits silver plate, goblets, and great spoons as well as a silver tube about 5 feet long and composed of several pieces screwed together by means of which he promises to cure deafness completely, plus an artificial foetus with four arms, four legs, and only one head, saying that the lady who had given birth to this owed her life completely to a dose of his elixir.[63]

Symptomatically, Engleberme was accused not only of displaying a 'gaudy show' (*étalage fastueux*) but of combining this with advertising handbills, which besides containing a good deal of verbiage about his alleged cures, cited his authorization by the Prévôté de l'Hôtel du Roi (dating from 1778), and gave a brief curriculum vitae in which it was stated that he had worked six months in Montpellier with the reputed venereologist surgeon Thomas Goulard (1724–84) and two years in venereal hospitals in Paris.[64]

The itinerant quack was going up-market and his escalator was the world of print. Qualifications, however ersatz, were proudly proclaimed in print. The advertising handbill of one Grassy claimed himself to be 'son of the first physician of the Medical Faculty of the famed University of Sapience in the city of Rome, graduate physician of the same university, former physician extraordinary to His Holiness Clement XIV, the Pope Ganganelli, and demonstrator in anatomy in the same university', before going on to claim a range of medical skills from the fashionably scientific (cutting for cataract) to the hopelessly archaic (urinoscopy).[65] Other itinerants displayed a touching awareness in a

[63] ASRM 199 d.1.

[64] A 'Dangleberme' was indeed given a licence to sell *orviétan* by the Prévôté de l'Hôtel but in 1780 not 1778: AN V3 198 (fo. 160). An account of an itinerant in the Poitou in 1773 talks of one 'Danleberme Padoinelle' (ASRM 199 d.26), and it is conceivable that this is the same individual as one 'Angelucci Padouanel' awarded an *orviétan* franchise by the Prévôté de l'Hôtel in 1763, 1766, 1772, and 1774: AN V3 198 (fos. 5, 37, 95, 120). It is probably the same individual being denounced at Rennes in 1789 (ASRM 199 d.9) and in La Rochelle in 1781 (M. Soenen, *La Pharmacie à La Rochelle avant 1803* (La Rochelle, 1910)), 159.

[65] ASRM 199 d.29. Ramsey cites a handbill for what seems to be the same individual derived from the departmental archives of the Ille-et-Vilaine: *Professional and Popular Medicine*, 136.

kind of Rousseauian simplicity: after a long, rambling spiel, full of absurdities, the handbill of 'sieur Philippe, botanist and druggist' concluded: '(h)e begs the reader not to take much notice of his style, for, having always lived in the mountains, he has always applied himself to knowing the simples from which he composes his remedies rather than in seeking to impose them by the beauty of his discourse'.[66]

The eighteenth century was not the first time that the unlicensed practitioner had utilized the medium of print. The very word *affiche* denoted, after all, the wall-poster which had been utilized since the sixteenth century as a means of buying, selling, and advertising, and which traveller Martin Lister had remarked in Paris under Louis XIV at the end of the seventeenth century. It was in the Enlightenment, however, that print became an integral part of the procedures of medical commercialism. The newspaper, buttressed by the brochure, the handbill, and the pamphlet—all serving integrative market functions—propelled medical charlatanism from oral into print culture. The itinerant quack was, seemingly, increasingly comfortable within the world of print. 'The public', reported one anonymous writer on the eve of the Revolution, 'is being ceaselessly inundated by advertisements [*avis*] for secret remedies.' These came in a number of guises: 'cards indicating a change of address; writings not endorsed with official authority; handbills which appear to announce a medical book but which at the same time declare that the author is the owner of a particular medical treatment'; and so on. Such individuals also, it was claimed, were using newspapers to hawk their goods around France as a whole.[67] Print was thus allowing medical entrepreneurs a much greater outreach throughout the country than ever before. Where once the street-corner or the Pont-Neuf had been their oyster, the whole country was now opening up to their wiles. Print amplified, modulated, and made more respectable the formerly stentorian tones of the street-hawking charlatan.

Newspapers and the periodical press formed a particularly important part of this process of widening the markets for medical goods and services. We have already noted how the volume and format of medical publishing in the Enlightenment had widened the boundaries of the audience for medical information.[68] The shift from Latin to French as the scientific language of first resort and the adoption of more informal modes of communication addressed to the general reader as well as the fellow-physician helped boost the volume and the commercial viability of medical writings. The flourishing state of medical journal-

[66] ASRM 199 d.23.

[67] Archives de l'Académie royale de Chirurgie 4 d.3. (These documents relate to the Royal Society of Medicine, and have been wrongly catalogued at this mark. They are held in the Archives and Library of the Académie Royale de Médecine.)

[68] See above, Ch. 6, Sect. D.

ism highlighted these developments. Medicine played an important part in the journals devoted to *sciences et arts*, which were perhaps the most flourishing of all special-interest journals to appear in the Enlightenment.[69] But medical titles also did well. Following the false dawn of medical journalism under Nicolas Blégny, over a dozen such journals saw the light of day in the Enlightenment, more than half of them in the reign of Louis XVI. Some failed to make an impact and swiftly folded, but others prospered: notably the *Journal de médecine, de chirurgie, de pharmacie* from 1754, the *Gazette salutaire* from 1761, and the *Gazette de santé* from 1773. The general buoyancy was attested by a degree of specialization: there were journals for surgery (*Mémoires de l'Académie royale de Chirurgie* (1743–74)), for example, and military (*Journal de médecine militaire* (1782–9), and others) and colonial medicine (*Gazette de médecine pour les colonies* (1778–9)).[70]

Although clearly aimed at fellow-practitioners, none of these medical journals closed themselves off from the general reader. Noel Retz, editor of the *Nouvelles instructives ... de médecine* (1785–7) claimed to wish to attract and to instruct both physicians who 'may often float between the pro and the con for lack of sufficient information' and the general reader 'incapable of knowing about things himself and yet always inclined to make pronouncements about them'. The provincial market was particularly targeted by others: the *Gazette de santé* claimed initially to be 'specially destined for people in the countryside'.[71] Moreover, health was far from the sole preserve of the medical press. As we have seen, health matters were of general interest as well as scientific concern. One finds medical matter therefore not solely in the mainline scientific journals but also in the general-interest press. Particularly revealing, from the point of view of the present chapter, is the important place which medical items took in advertisers, or *Affiches*, which developed strongly after mid-century, notably in the provinces.[72]

Medical advertising had come some way since the times of Renaudot and Blégny. General newspapers such as the *Gazette* and the *Mercure de France* had contained advertisements from the seventeenth century—those in the *Gazette de France* often had a pronounced provincial flavour due to the practice of

[69] These and the following remarks are based primarily on the analysis offered in Sgard (ed.), *Dictionnaire des journaux*: see esp. ii. 1134–5.

[70] See ibid., *passim* under these titles (respectively nos. 1178, 582, 544, 876, 672, 543). For military medical journalism, see too M. Martin, *Les Origines de la presse militaire en France à la fin de l'Ancien Régime et sous la Révolution (1770–1799)* (Paris, 1975).

[71] For both these cases, see Sgard (ed.), *Dictionnaire des journaux*, under these titles (nos. 544, 1034).

[72] See Jones, 'Great Chain of Buying'. That article, and the following paragraphs, are based on extensive sampling done on the numerous provincial *Affiches* which are lodged in the holdings of the BN.

having local reprint editions in major cities.[73] A number of attempts were also made to follow up on Renaudot's sundry initiatives and Blégny's *Livre des commodités*: advertisers appeared in 1703–5, 1716, and then again from 1747 to 1751.[74] In 1751 Renaudot's heirs as proprietors of the *Gazette de France* reorganized their business so that the bulk of advertising could be carried by advertiser newssheets. Two new papers of this kind were established in the capital—the *Affiches de Paris* and the *Affiches de province*—and the central office for these also sold the franchise for the production of regional versions to willing individuals in the provinces.[75]

By 1775 about a score of these provincial *Affiches* were in existence, by 1789 some forty-four. Four- sometimes eight-paged advertisers grouping their items under a standard set of rubrics (property sales, movable property, economic information, consumer goods of various sorts, and so on), these *Affiches* formed an extensive nationwide network, perhaps most firmly rooted in the big commercial cities of the periphery (Bordeaux, Marseilles, Rouen, Lyons, etc.) and in towns with strong administrative functions and with a large class of bourgeois and noble *rentiers*. As time went on, they contained a larger proportion of small articles on general and topical subjects of interest to their readers. They tended to address a social constituency which spilled into both the nobility and the world of domestic service but whose centre of gravity was among the 'middling sort' of traders, businessmen, the liberal professions, and bourgeois *rentiers* whose numbers had increased so signally over the course of the century. Abbé Vitrac, writing in the *Affiches de Limoges*, saw them as 'a kind of academy spread out throughout the provinces'—there was no higher praise for any organization with claims on knowledge.[76]

Organs of exchange of information and opinion, the newspapers never, however, lost their prime role as means by which the commercial transaction of goods and services was enacted. They installed in eighteenth-century France a 'Great Chain of Buying' (and selling) which transcended the face-to-face transaction and reached out more widely and more deeply than any other form of print. By arousing the public's curiosity, the editor of the *Affiches de la Basse-*

[73] G. Feyel, *La Gazette en province à travers ses réimpressions (1631–1752)* (Amsterdam, 1972). See too the brilliantly written C. Todd, 'French Advertising in the Eighteenth Century' (*Studies on Voltaire and the Eighteenth Century*, 266; Oxford, 1989), 513–47.

[74] See esp. Sgard (ed.), *Dictionnaire des journaux*, nos. 47, 48.

[75] The system is explained by G. Feyel, 'La Presse provinciale française dans la seconde moitié du XVIIIe siècle: Géographie d'un réseau', *Revue historique* (1984), 353–74. For medical issues, see too the fine study by id., 'Médecins, empiriques et charlatans dans la presse provinciale à la fin du XVIIIe siècle' in *Le Corps et la santé: 110e Congrès national des Société Savantes (Montpellier 1985)* (2 vols., Paris, 1985), i. 79–100. For the Paris-based papers, see Sgard (ed.), *Dictionnaire des journaux*, nos. 49, 57; and for the provincial ones, see ibid., *passim*, and esp. nos. 6–71.

[76] Cited in Feyel, 'Presse provinciale', 40.

Normandie explained in 1762, the aim was 'to interest at the same time its health, wealth, and economic needs'.[77] As this quotation suggests, medicine permeated every aspect of the operation of these advertiser sheets. Their very aim was, after all, 'circulation', and they sought a 'fermentation', an 'effervescence', an 'exaltation' of society, which they strove to 'electrify', even by the 1780s to 'mesmerize'. The public dimension of medicine received a great deal of attention. Discussions of domains of socio-medical action such as smallpox inoculation, hospital reform, relocation of cemeteries, public health measures, and so on were legion. There were numerous reports of meetings and deliberations of academies and learned societies. Much coverage was given too to public courses of a medical and scientific kind: anatomy lessons, dissections, major operations such as cataract-cutting and Caesarean section, midwifery courses, botanical rambles led by select academics, and so on. Great medical interventions—accounts of miracle cures or brilliant surgical coups—merged with a more overtly sensationalist wing of *Affiches* reporting: reports of a bewitched woman giving birth to six frogs in Picardy or of a nun emitting stones from vagina and anus, and tales of five-footed calves, numerate horses, extraordinarily hirsute toddlers, and sprightly 150-year-old geriatrics.

Domesticity and private life were an especial target of medical news and advertisement. Making the public world more open to exchange and debate was matched by a desire (often ascribed to women readers) to render the reader's domestic environment cleaner, purer, more comfortable, less smelly, more secure, fire-insured, and vermin-free.[78] The body was an especial focus for medical consumerism. Indeed, so geared to the body were the advertisers that even politics took on a corporeal dimension: readers were kept informed of the king's health, the queen's deliveries, the royal children's smallpox inoculations. More generally, the *Affiches* served endlessly to sanitize, endlessly to prettify personal appearances. Creams promised to remove wrinkles and restore hair, sometimes at the same time. The rudiments of primitive health were emphasized by some advertisers: thus bear-grease from Louisiana, 'prepared without fire by savages', was proclaimed a well-attested way of overcoming baldness. Teeth could be worn clean, pure, white, odour-free, and—thanks to the *Affiches*—could be worn false.

Commodities of every conceivable kind attested to burgeoning medical wants and needs. Advertisements for proprietary medicines were especially numerous, as we shall see, while medical books formed a staple market too. There were also medical engravings—of the famed lithotomist Frère Côme (1702–81), for

[77] *Affiches de la Haute et Basse Normandie*, 'Prospectus', Jan. 1762.

[78] On this theme, cf. R. Favre and P. Rétat, 'L'Amélioration de la vie quotidienne', in J. Sgard (ed.), *La Presse provinciale au XVIIIe siècle* (Grenoble, 1983).

example.[79] Anatomical objects abounded: anatomical dolls; upholstered pelvises for acquiring obstetrical legerdemain; skulls and skeletons; table-top models of the genitalia of both sexes; and so on. The *Affiches* also contained advertisements for medical appliances and surgical instruments of a baroque fantasy which await their archaeologist: herniary trusses of every shape, size, price, and consistency; probes, scalpels, saws, cutting edges of every description; neck collars and harnesses; tourniquets; catheters; false teeth, glass eyes, artificial limbs, ear-trumpets, and surgical boots; DIY tooth-extractors and portable urinals—the list is endless.

Medicine was, moreover, constantly utilized as a selling-point for commodities and services in which earlier generations might not have detected a medical dimension, and the phrase *de santé* resounded like a marketing mantra in some unusual places. Proprietors of private infirmaries, madhouses, and old peoples' homes extolled the virtues of their *maisons de santé*; proprietors of public baths vaunted their *bains médicinaux*, their *bains de santé*; grocers offered *thé de santé*, or *thé balsamique et stomachique des Alpes*; chocolate-makers displayed their *chocolat de santé* (which some critics stated should be renamed *chocolat de maladie*); boilermakers advertised *poêles hydrauliques et de santé*; corset-makers had *corps de santé* made up; bedmakers had on offer *lits mécaniques pour le soulagement des malades*, and proudly announced airbeds, prized for comfort, economy, sensual delight, but above all for ... *la santé*. Soap-manufacturers, in a masterly fashion which combined health, cleanliness, and a *frisson* of exoticism, advertised *pâté de propreté en usage chez les orientaux dans les harems*. Dancing-masters preened their skills in *l'art de prévenir et de corriger les difformités de corps*. Even when having fun it was important to keep healthy: such was the message of medical practitioners who, in homage to the new concern for health, were starting to call themselves *ministres* or *officiers de santé*.[80]

Medicine thus served the public interest and also the pursuit of domestic comfort and helped celebrate and define new conceptions of personal health, happiness, and virtue, for it was automatically assumed that the consuming reader of the *Affiches* was a model citizen (the status of 'subject' was rarely evoked). Health considerations played a crucial role in the project of the *Affiches* which, by transacting a kind of cultural circuitry, constructed a new collectivity of fellow producers and consumers, male and female, locked together in mutually beneficial networks of markets and exchanges. Agents of commercialization, the *Affiches* also moralized and sanctified that commercialization process.

In time, the *Affiches* would give the avatars of commercialism a number of subtle, implicitly political twists: the positive levelling virtues of the market

[79] For his activities, see below, Ch. 12, Sect. B.
[80] For the *officiers de santé* after 1789, see below, Conclusion, Sects. C and D.

could be contrasted with the stale rigidities of the Society of Orders, or else illicit forms of commerce might be linked to court corruption.[81] At the height of the Enlightenment, in contrast, the *Affiches* were very much the home of happy marketeers: the market of the *Affiches* was anodyne, socially desirable, lovable even. Speculation, famine, want, and greed rarely entered into the equation, save only as an implicit rebuke against the wastefulness and parasitism of aristocratic society. Food, for example, was seen as an integral factor of material well-being and not, as in the court-orientated *Gazette*, as the occasion for ceremonial ritual and conspicuous display. Remedies were earnestly offered for those who ate too much or too richly (there was particular concern for gout-, haemorrhoid- and indigestion-sufferers), while for those faced with hunger and starvation there were helpful suggestions for healthy eating such as *soupes économiques* and bread made from potato-flour (the latter entitled *farine de santé*, and especially recommendable in that any spare could be used for hanging wallpaper: starving peasants, please note!).[82]

Newspapers like the *Affiches* were a crucial part of any strategy aimed at maximizing publicity and demand for a medical commodity or service. The major producers of proprietary medicines were all evolving in the direction of more sophisticated marketing programmes, with newspapers as a strategic means of promotion (and self-promotion). Faynard's haemorrhagic powders were advertised in the *Affiches de Paris*, the *Affiches de province*, the *Affiches des Evêchés et Lorraine*, the *Affiches de l'Orléanais*, the *Affiches de Poitou*, the *Affiches de Toulouse*, and doubtless in many others too; Belloste pills were advertised from the *Affiches de la Haute et Basse Normandie* in the north to the *Affiches de Provence* in the south. In a related vein, the Aix graduate and Paris-based court physician Pascal Faure de Beaufort (1712–95), for example, utilized the pages of the *Affiches* to draw attention to his *eau anti-putride* (condemned later in the century as a dangerous fraud). He also offered a kind of package deal for individuals who would act as local agents and retailers. No prior medical experience was required in the administration of the remedy. Faure offered to provide a crate of fifty bottles plus accompanying brochures. The recipient would pay carriage, and advance Faure 50 *livres* on account. Each bottle would sell at 3 *livres* 10 *sols* and from the proceeds the recipient would reimburse his costs and take 20 *sols* for each bottle sold.[83]

[81] See below, Chapter 12, Sects. E and F.

[82] On food, see esp. J. C. Bonnet, 'La Presse et le problème alimentaire', in J. Sgard (ed.), *Le Journalisme d'Ancien Régime: Questions et propositions* (Lyons, 1982); and id., 'Les Problèmes alimentaires dans la presse de 1768', in J. Varloot and P. Jansen (eds.), *L'Année 1768 à travers la presse traitée par ordinateur* (Paris, 1981).

[83] For the package deal, see ASRM 199 d.1. For newspaper disapprobation, the *Bibliothèque physico-économique, instructive et amusante* (1784), 217 ff. Faure had a chequered history,

Physicians expressed concern about the ways in which these new forms of medical entrepreneurialism through print could have the effect, by bringing medical commodity and consumer more directly into contact, of cutting them out. The papal enclave of Avignon—a notorious centre for the illicit book-trade and a thriving centre of this new industry within the medical penumbra—drew many reproaches. The Avignon physician Calvet denounced the local *Affiches* for carrying advertisements for Bacher waters and attacked other producers of illicit remedies: 'Avignon is their arsenal. We find here Goderneau powders; May's tartar, Sibié's pills, balsamic oil; D'Acher, Kermiol, Delome, Berthelet waters; and many others that I do not know. There are twenty houses in the city in which balms and unguents are manufactured for wounds and waters for the eyes'.[84]

Nearby Carpentras, capital of the Comtat Venaissin and similarly outside French jurisdiction, was the bolthole and commercial headquarters of the Aillaud (or Ailhaud) dynasty, manufacturers of the purgative powders which bore their name. Proclaimed as a panacea by Jean Aillaud (1684–1756) in the late 1730s, and marketed assiduously from the mid-1740s, Ailhaud powders built up a national clientele, with some international pretensions. In 1769 Aillaud secured royal letters patent to allow the medicines free entry and circulation within France, and soon was claiming to have a network of regional agents: Avignon was his main entrepôt, but there were also agents in Paris covering northern France, Strasburg for Germany and northern Europe, and Marseilles for Italy and the Mediterranean countries. The twelve volumes he published between 1764 and 1774 under the title *Médecine universelle* contained case after case, letter after letter, from grateful clients, and ensured the family fame and fortune. Jean purchased the royal seigneurie of Castelet in 1758, and his son Jean-Gaspard took a medical degree at Aix-en-Provence and acquired a particule before succeeding his father to the barony and the business, which survived the Revolution intact.[85]

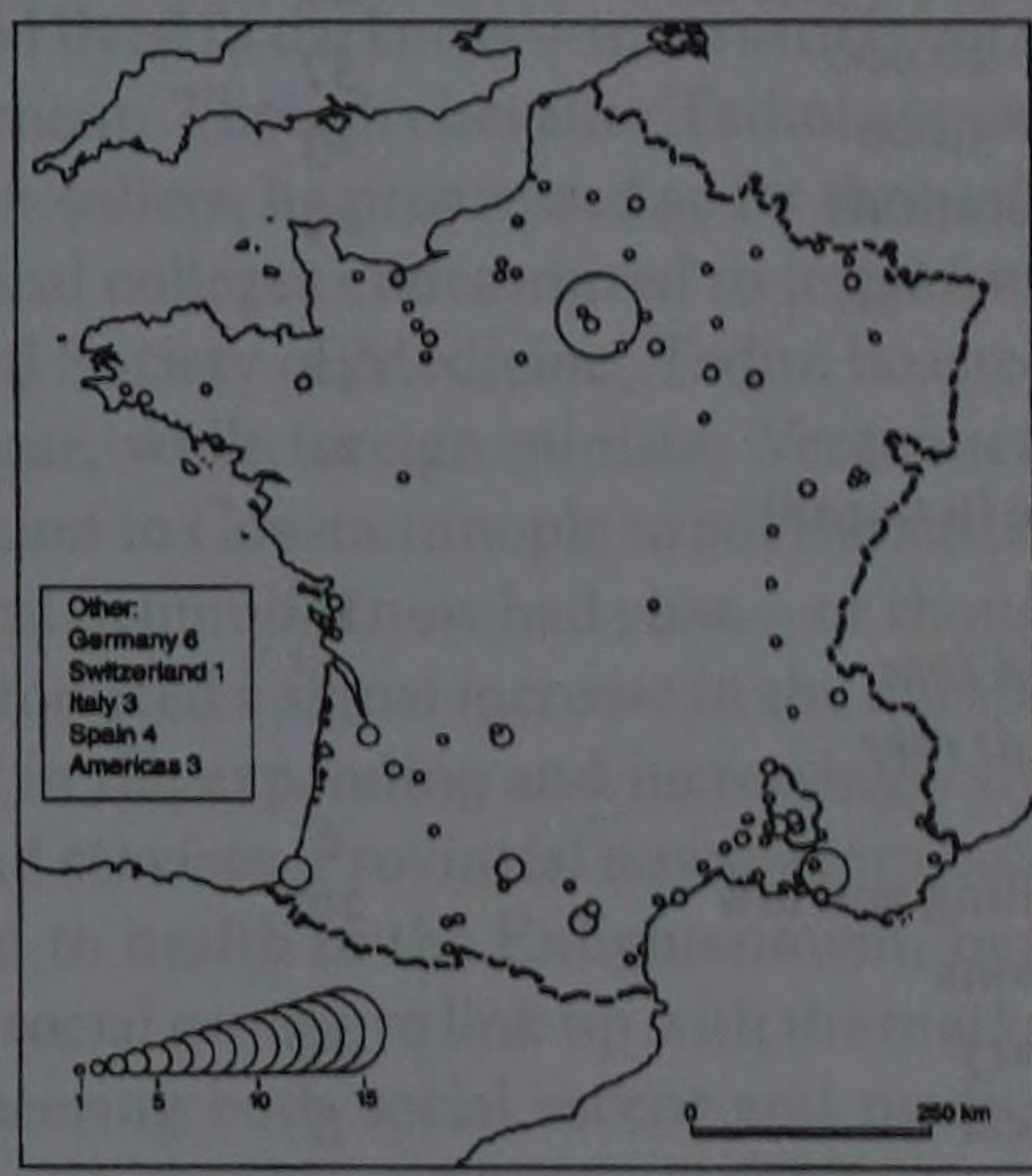
The first volume of his *Médecine universelle*, detailing cures effected between 1724 and 1754 on illnesses ranging from abscesses to apoplexies, from leprosy to

purchasing posts in the royal medical household in the 1750s (AN O1 99–103), later being placed in the Bastille, and also being involved with a scheme for medicinal baths (ASRM 201 d.10; and F. Funck-Brentano, *Catalogue des manuscrits de la Bibliothèque de l'Arsenal*, ix. *Archives de la Bastille* (Paris, 1892), 220).

[84] ASRM 199 d. 12. For Avignon and the book-trade, see R. Moulinas, *L'Imprimerie, la librairie et la presse à Avignon au XVIIIe siècle* (Grenoble, 1974). Goderneau powders were for syphilis, the other remedies, as far as we can judge, for a variety of ailments.

[85] Jean Ailhaud, *Médecine universelle prouvée par le raisonnement démontrée par l'expérience* (12 vols., Carpentras, 1764–74). See AN ADXI 22 for a copy of the 1769 letters patent. The original publication was Jean Ailhaud 'd.m.' [*sic*], *Traité sur l'usage et les propriétés de la poudre purgative* (Avignon, 1737). For the later career, see AN F8 149. The social climber Jean-Gaspard would doubtless have been enchanted to have been cited as 'un noble éclairé': such is the appellation bestowed on him by M. Vovelle, *Piété baroque et déchristianisation en Provence au XVIIIe siècle: Les Attitudes devant la mort d'àprès les clauses des testaments* (Paris, 1973), 81.

haemorrhoids, from colics to fevers, and from gout to paralysis, showed the breadth of his support from patients located throughout the length and breadth of France and beyond (see Map 10*b*). His clientele was far from the bunch of ignorant yokels one might be led to expect such a practitioner would attract. It was overwhelmingly urban: roughly 40 per cent derived from large cities, a fur-



MAP 10*b*. Geographical location of individuals whose testimonies to Ailhaud's purgative powders were published in Ailhaud's *Médecine universelle* (period 1724–1754)

Source: Jean Ailhaud, *Médecine universelle prouvée par le raisonnement démontrée par l'expérience* (12 vols., Carpentras, 1764–1774), i. Collected testimonials.

ther 30 per cent from middling cities, and less than a quarter from non-urban locations (see Table 10*b*). It was surprisingly male too; less than a fifth were females. (Perhaps the latter were more at home browsing in the piety-drenched pages of works such as Madame Fouquet's *Recueil de remèdes*, which targeted a female audience.) Clients included some high-ranking individuals: a councillor from a *parlement*, a president from a *cour des aides*, a *sécretaire d'état*, and a smattering of foreign diplomats. Ecclesiastics, both secular and regular, high and low, made up a significant proportion too, while among the laity, the key elements of the urban élite (business, administration, and the professions) were all present. For such a penumbra-based figure, there were even medical practitioners to be found, though noticeably no physicians.[86]

[86] It is certainly conceivable that some of the cases were fictitious. However, had widespread fraud been used, it seems likely that it would have been detected, such was the social prominence of many of the individuals cited in his literature. The medical men were 3 surgeons, 3 apothecaries, 1 pharmacist, and 1 druggist.

TABLE 10*b*. *Users of Jean Ailhaud's* poudres purgatives, *1724–1754*

	No.	%
Location ($n = 130$)		
Cities over 50,000	25	19.2
Cities 20,000–50,000	26	20.0
Cities 5–20,000	37	28.5
Cities 2–5,000	13	10.0
Other locations	29	22.3
Gender ($n = 163$)		
Men	142	87.1
Women	21	12.9
Occupation ($n = 128$)		
Church	37[a]	28.9
noblesse d'épee	9[b]	7.0
noblesse de robe		
High	5	3.9
Middling and low	20[c]	15.6
Professions		
Military	20	15.6
Medical	8	6.3
Law	5	3.9
Other	5	3.9
Business	12[d]	9.4
Foreign diplomats	4	3.1
High domesticity	3	2.3

Source: Jean Ailhaud, *Médecine universelle prouvée par le raisonnement démontrée par l'expérience* (12 vols.; Carpentras, 1764–74), i. Collected testimonials for the value of the medicines.

[a] of whom 6 women
[b] of whom 1 woman
[c] of whom 2 women
[d] of whom 1 woman

The case of the Aillaud dynasty illustrated how large-scale pharmaceutical operations could bring a well-off clientele and an achieved social ascent. Practitioners outside or on the margins of the corporative medical community with a marketable skill had much the same route open to them, especially if they knew how to incorporate newspaper publicity into their marketing strategies. The most consummate examples of the trend among the manually skilled were the virtuoso oculists, especially those who cut for the cataract. The prototype here was the chevalier Taylor (1703–74), who had qualified as a physician at Reims in 1734 and whose stately progress through the country in the 1760s and around

the courts of Europe was followed by the *Affiches* as if he had been a triumphant military conqueror.[87] Taylor's self-styled apostle, chevalier Tadini (the acquisition of petty pseudo-nobility was clearly an occupational hazard among *oculistes*), or the Toulouse-based Nizet de Varennes were other ardent publicists. In the past, such individuals might have been viewed as footloose quacks, but now they presented a quite different face. Cutting for the cataract—bringing light to those who had lived in darkness—was a satisfying surrogate miracle for the age of Enlightenment. Though chevalier Tadini appears to have started life in a troupe of *orviétan*-sellers, he progressed so far through his cataract-cutting skills that local medical colleges endeavoured to learn from him. Vicq d'Azyr, secretary of the Royal Society of Medicine, Tadini boasted, had corresponded with him as a colleague, while foreign minister Vergennes had even employed him on a special mission to Constantinople to cut the sultan's sister's cataract.[88]

Clearly, the medical penumbra now had class—or thought it did. Marketing developments had produced a signal increase in the number and self-esteem of individuals involved in the expanding and increasingly dynamic market-place for medical goods and services. Provincial newspapers not only proclaimed the high value attributed to health in the Enlightenment, but also allowed a wide and diverse range of social groups to link up with the market and to utilize print as a means of engineering both social ascent and medical respectability. No trained physician or ambitious élite surgeon in the past would have dreamt, for example, of concocting a new herniary truss, designing a surgical boot, or retailing a proprietary medicine. Yet there were many individuals who now would. The result was an expansion of the parameters of the medical penumbra as well as an increase in its dynamism. The mustard and vinegar retailer Maille, *vinaigrier du Roi*, for example, an assiduous user of the *Affiches de Paris* and a

[87] For Taylor, see R. S. Porter, *Health for Sale: Quackery in England, 1660–1830* (Manchester, 1989); and cf. the satirical [La Mettrie], *Première Lettre de M. Jovial, médecin de Bourges à M. Emmanuel Konig, médecin de Basle* (n.p., n.d.). For Taylor's degree, see BM Reims 1085 fo. 124; and for his career, see BM Avignon MS 5689, 'Les Oculistes en Avignon au XVIIIe siècle' (clippings from the *Affiches d'Avignon*). For reporting in the other *Affiches*, see e.g. the *Affiches de Bordeaux* and the *Affiches de province* in 1765, the *Affiches de l'Orléanais* in 1766, and the *Affiches de la Haute et Basse Normandie* (recording his death) in 1771.

[88] For Tadini, see P. Delaunay, 'Les Guérisseurs ambulants dans le Maine sous l'Ancien Régime', in *IIe Congrès d'histoire de la médecine* (Evreux, 1922), 4 (the Vergennes incident); ASRM 199 d.9 (Vicq d'Azyr); ibid. d.18 (two incidents of *orviétan*-selling). He also surfaces in the *Affiches de la Haute et Basse Normandie* in 1773, the *Affiches de l'Orléanais* in 1782–3, and the *Affiches des Evêchés et Lorraine* in 1785. Nizet de Varennes's publicity is especially profuse in the *Affiches de Toulouse* in the 1780s. Dental specialists offering a wide variety of mouthcare services were the other most prominent category of mobile experts: see e.g. *Lettre de M. Bourdet, chirurgien-dentiste reçu à Saint-Côme, à M. D**** (n.p., n.d.), printed along with a handbill from the *Affiches*, in *Recueil de pièces* (BN 8-T18–120), iii. Provincial *Affiches* constitute a marvellous source for, besides oculists and dentists, a whole array of midwives, herbalists, corn-cutters, herniotomists and others.

number of provincial *Affiches*, composed among his 180 mustards a *moutarde de santé* which he distributed gratis to the poor: a fact which he rarely failed to mention in his ambitious publicity campaigns.[89] If a mustard-maker could offer medical services, so could many other types of artisans and shopkeepers. On the eve of the Revolution in Versailles, for example, individuals retailing secret remedies included, besides a couple of surgeons and a few apothecaries, a musician, a cobbler, three grocers, a perfumer, a lemonade-seller, an enameller, and a number of private individuals.[90]

As well as being more commodiously lodged within the erstwhile medical core, and containing a higher admixture of graduate physicians, the medical penumbra was thus far more diverse than before. In 1781, for example, the Montpellier physician O'Reilly, who practised in the little Cévenol town of Sauve, complained bitterly about the problem he was having with illicit practitioners, among whom he ranked not only 'silly women [*femmelettes*], ... peasants professing hereditary secrets, ... setters of stomachs, cutters for the stone,' but also 'operators and travelling showmen [*jongleurs*], [and] the rowdy promoters of Ailhaud and Irrhoé powders', as well as 'the front-men of the brother-apothecaries of the monasteries of the Capucins, the Cordeliers, etc.'.[91] The presence of ecclesiastical practitioners of medicine who brought up the rear of this motley crew of irregulars was not fortuitous. The processes of publicization through print and commercialism had an impact on the medicine practised by ecclesiastics as well as the laity. There was still a non-natural physic which was retailed through print and advertisement of course: the Bibliothèque bleue retained its heavy orientation around post-Tridentine piety and fostered the cult of the miraculous.[92] Yet the last century of the Ancien Régime also saw the natural medicine of monastic communities becoming more effectively geared to market demand.

As the century wore on, religious communities came to follow the pioneering example of the colourful 'Capucins of the Louvre', fathers Aignan and Rousseau, who had been among the most successful medical entrepreneurs at the court of Louis XIV.[93] Now print allowed their heirs to venture far beyond the confines of the court into the expanses of the bourgeois public sphere. A number of religious houses had remedies which they actively advertised. The

[89] Maille's publicity can be found particularly profusely in the *Affiches de Paris*, but he advertised extremely widely within the provinces as well. See too AN V3 198 (12 July 1765).

[90] M. Bouvet, *Histoire de la pharmacie en France des origines à nos jours* (Paris, 1937), 173.

[91] ASRM 199 d.12. On 30 July 1768, Monnier and Carpentras (père et fils) were awarded a licence to retail the *poudre Irrhoé*, which they had inherited: AN V3 198.

[92] Cf. above, Ch. 6, Sect. E. See esp. L. Andries, *La Bibliothèque bleue au XVIIIe siècle: Une tradition éditoriale* (*Studies in Voltaire and the Eighteenth Century*, 270; Oxford, 1989).

[93] See above, Ch. 4, Sect. D.

melissa water (*eau de Mélisse*) manufactured by the Carmes Déchaussées of the Faubourg Saint-Germain in Paris was widely advertised and indeed even achieved formal certification by the Louvre Commission. By 1765 the remedy was bringing the monastery 20,000 *livres* a year.[94] The *suc de réglisse* produced by the nuns who ran the Hôtel-Dieu at Blois gained royal authorization too. The Dames *chanoînesses* of the royal abbey of Sainte-Périne in Chaillot advertised their chest syrup in the *Affiches de Paris* in 1751 and cited four retail outlets in the capital. Other advertisers in provincial newspapers included the Benedictine nuns of the royal abbey at Sens, with their *eau cordiale*; the Benedictine monks at the abbey of Bec in Normandy, with their wound ointment; and the Rodez Jesuits whose apothecary produced a topical remedy and plaster against goitre.[95]

Other ecclesiastics acted like petty entrepreneurs. The Lazarist priest Dauça ran a long advertising campaign in a number of *Affiches* for his herniary bandages, while the Paris Grands Augustins were also famous for giving out free trusses to the poor. Daubroche, the *curé* of Patay in the Orléanais, had an anti-haemorrhagic which he originally distributed gratis to the needy. When, however, he secured a warrant from first physician Sénac, he set up a little business for himself.[96] The scale of the commercialization of ecclesiastical medicines might, in fact, have been even more extensive than it was, had not the Parlement of Paris kept it within bounds. The corporative medical community, also unhappy about ecclesiastical meddling in health matters, routinely retailed horror stories: one told of how a Burgundian *curé*, convincing himself that the illness of one of his parishioners had diminished his natural heat, placed a bellows in the unfortunate man's anus and pumped him up, causing a hyperinflation of the intestines which caused his death.[97]

Although many of these religious bodies kept the option of distributing the remedies gratis to the local poor, entrepreneurialism was now very much more in the picture. This was true even for female nursing communities. Although their commitment was primarily to the sick poor in the institutions to which

[94] M. Fosseyeux, 'Les Apothicaireries de couvents sous l'Ancien Régime', *Bulletin de la Société de l'histoire de Paris et de l'Île-de-France*, 46 (1919), 51; *Les Vertus d'une eau de mélisse composée aux Carmes Déchaussez de Paris, souveraine contre l'apopléxie et les vapeurs* (n.p., n.d.), BN T151–748A.

[95] Besides Fosseyeux, 'Apothicaireries', see *Affiches de l'Orléanais*, 2 Dec. 1768 and ASRM 115 d.1 (Blois); AN V3 198 (24 Aug. 1766) and *Affiches de Paris*, 21 June 1751, 7 Nov. 1768 (Chaillot); ibid., 6 May 1748 (Sens); *Affiches de l'Orléanais*, 17 Jan. 1766 (Bec); *Affiches de province* (7 Aug. 1754).

[96] *Affiches de province*, 2 Aug. 1784, 16 June 1785, and *Avis Divers*, 15 Feb. 1777, 24 Feb. 1778 (Dauça); *Affiches de province*, 6 Mar. and 17 July 1765, 21 Feb. 1766, 21 Feb. 1770 and *Affiches de Paris*, 24 Apr. 1769 (Daubroche). For the Grands Augustins, see Fosseyeux, 'Apothicaireries', 57.

[97] ASRM 115 d.6 for the *curé*. For the Parlement's opposition, see Fosseyeux, 'Apothicaireries', 58.

they were attached, they also marketed their drugs on occasion. At Tournus, the Daughters of the Charity were specifically instructed that they should run a dispensary in which they could 'sell medicines to the wealthy and bourgeois, to merchants and other individuals not in need'. Here as elsewhere, the aim was to make profits which could be ploughed back into their institutions. There were similar arrangements with the Daughters of Charity at Albert, Apt, Nesle, Orange, and elsewhere. Phlebotomy was the basis of the treatment offered by the *hospitalières* at Magnac-Laval in the Limousin: they cared for several hundred paupers annually.[98] Sometimes, as in Montpellier in the 1720s and Lunel in the 1740s, local apothecaries took the sisters to court for providing unfair competition. The charge was the same at Metz, where the Brothers of Charity were accused of engaging in paid work which should have come the way of local surgeons.[99]

The fact that even for nursing communities business was spilling beyond the traditional concern for ministering to the sick poor into the market for health highlighted the way in which the medical penumbra, assisted by the mechanisms of print, had increased in size, visibility, and dynamism over the century. Print also permitted irregulars of every sort a greater degree of social acceptability, offering literary sanctification for commercial activities which an earlier generation would have dismissed as quackery. Individuals who had long furtively lingered in the medical shadows, now had a respectable medical veneer, a patriotic sheen, and a sizeable audience. Against this background, we can more readily understand the competitive stakes in the campaign which Enlightenment medicine launched against what it dubbed charlatanism.

D. Learning to Live with 'Charlatanism' on the Medical Market-Place

'Never', opined one well-informed, if lightly mocking, pamphlet on the eve of the Revolution, 'have so many charlatans been seen as in this eighteenth century.'[100] No one reading reflections on the state of medical provision in the late eighteenth century can fail to be impressed by the strength of the movement against a multiform charlatanism, and the hostility that movement conveyed. By the 1780s the numerous provincial physicians appointed as corresponding

[98] AN S6177 (Tournus), S6160 (Albert, Apt), S6172 (Nesle, Orange); and for Apt, see too AD Vaucluse, Archives hospitalières d'Apt E6. See too AD Haute-Vienne: Archives hospitalières de Magnac-Laval G3–6. For a fuller discussion of the nursing communities, see below, Ch. 11, Sect. D.

[99] AD Hérault, Archives de l'Hôtel-Dieu Saint-Eloi de Montpellier (antérieures à 1790) E 11 (Montpellier); AD Hérault C 565 (Lunel); AD Moselle. Archives hospitalières de Metz F 20 and *Mémoires des faits que les chirurgiens de Metz imputent aux Frères de la Charité de la même ville* (n.p., n.d.) (Metz).

[100] *Etrennes des Enfans d'Esculape dédiées au beau sexe* (London, 1788), 49.

members of the Royal Society of Medicine were to act as a kind of public-service delation agency, forever blowing the whistle on the misdeeds of sundry popular practitioners, quacks, murderous midwives, and the rest throughout France.[101] Before that, in 1772 Montpellier-trained physician Jean-Emmanuel Gilibert, a favoured pupil of the great Boissier de Sauvages, had published an Enlightenment compendium of such deviant forms of medical provision. His title, *L'Anarchie médicinale, ou la Médecine considérée comme nuisible à la société*,[102] revealed the drift of his thinking. Medicine was so poorly taught, he argued, that even trained physicians could wreak harm on their patients; but because its formal practitioners were so ineffectual, the sick had endless recourse to popular healers of one sort or another who offered forms of treatment which were even more deleterious. He claimed that for every consultation the sick made with a trained physician, they had three transactions with the untrained and unlicensed. Gilibert's text, which can be read as a classic flowering of the neo-Hippocratic emphasis on hygiene as a means of achieving collective health, vented its spleen *seriatim* on charitable ladies, itinerant mountebanks, herbalists, druggists, monastic pharmacies, sisters of charity, and barber-surgeons. It was vigorously misogynistic:

> There is no sick person among the poor who, before subjecting himself to the physician, has not tried the remedies of the women in his household or his neighbourhood ... Our towns and rural areas are populated by old bedside watchers who imagine that because they have handed out some bouillons they can exercise the full extent of medicine. ... Poisons, blades, and daggers are less dangerous than their remedies.[103]

Such women and their male peers seemed a permanent affront to 'health and virtue', 'the only real goods'.[104]

The anxiety of the orthodox medical community about the charlatanism of the medical penumbra was, of course, nothing new. Yet whereas in the past a great deal of the scorn of the corporative medical community had been directed at practitioners of popular medicine who served a rather different clientele from themselves, orthodox practitioners found themselves competing in the

[101] We have drawn—and continue to draw, in this and subsequent chapters—on the Society's correspondence, in ASRM, which provides a marvellous fresco of popular medicine. See too J. P. Peter, 'Une enquête de la Société royale de Médecine (1774–1794): Malades et maladies à la fin du XVIIIe siècle', *Annales ESC* 22 (1967), 711–51; id., 'Les Mots et les objets de la maladie: Remarques sur les épidémies et la médecine dans la société française de la fin du XVIIIe siècle', *Revue historique*, 246 (1971), 13–38; and H. Mitchell, 'Rationality and Control in French Eighteenth-Century Medical Views of the Peasantry', *Comparative Studies in Society and History*, 21 (1979), 82–112. The *cahiers des doléances* of 1789 (on which see below, Conclusion, Sects. B and C) also illuminate the theme, as do the replies to the Health Committee of the National Assembly in 1790–1, on which see T. Gelfand, 'Medical Professionals and Charlatans: The *Comité de salubrité enquête* of 1790–1791', *Histoire sociale/Social History*, 11 (1978), 62–97.

[102] (3 vols; Neuchâtel, 1772). [103] Ibid., i. 242–8. [104] Ibid. 3.

eighteenth century with a more mixed and increasingly commercialized crowd, who enjoyed links with a better-heeled set of patients. This linked too to the increasing numbers of trained physicians finding it difficult to secure a niche at the heart of the corporative community.[105] Increasingly, it seemed, the empiric-barbarians had penetrated the portals of the medical community, and the more heavily commercial values with which they had been associated began to erode the traditional certainties of corporative medicine. The dynamism of the medical market-place erected very largely, as we have seen, on the world of print and driven by burgeoning social demand for health provision, forced even the corporative die-hards towards some measure of accommodation.

At some stage in the last decades of the Ancien Régime, then, a more commercial approach to medical provision became broadly acceptable to a significant section of the community of learned physicians. There had been a time, for example, when any kind of publicity by a physician was viewed as a matter of *lèse-faculté* of the most serious kind. In 1759, for example, the physician Arrazat put a notice in the *Affiches de Toulouse* to the effect that he was newly established in the city and invited custom. A week later he was forced to retract in the face of a furious letter from the Toulouse Faculty condemning this action. It was wrong, the latter argued, that a physician should 'make himself known, should use the means of the small-ad [*annonce*] and such other channels which are normally the preserve of charlatans and empirics'.[106] Between the 1750s and the 1780s, however, a considerable sector of the corporative medical community seems to have come to terms with commercialized medicine.

Few physicians sold themselves as blatantly as had Arrazat in 1759, though it is certainly pertinent to note that we do have a number of handbills of individual physicians from this period which, under the guise of the calling-card, have the hallmark of the charlatanesque.[107] Professional delicacy still tended to rule out certain styles of self-promotion: any faculty, opined the medical jurisprudentialist Verdier, would strike from its rolls 'any one who displays himself ... as a public spectacle', while in 1784 the *Affiches de province* maintained that 'delicacy and honour impose on physicians not publicly to advertise themselves [*ne point s'afficher*]'.[108] Publicity and commercialism were not adopted by all medical practitioners. There was a good deal of resistance among provincial practitioners in particular, who affected a vigorously anti-metropolitan disdain, condemning 'the boldness of charlatanry and ... low sentiments which pre-

[105] See above, Ch. 8.

[106] *Affiches de Toulouse*, 18–19 Nov. 1759. For a similar case, cf. the *Gazette d'Epidaure* (1761), 196.

[107] See the handbill of Jacques Barbeu du Bourg, (Paris medical graduate) (1709–79), in *Recueil de pièces* (BN 8–T18–120), vii.

[108] Verdier, *Jurisprudence de la médecine*, i. 705; *Affiches de province*, 22 Apr. 1784.

dominate in almost all who succeed in Paris'.[109] Many provincial practitioners would doubtless have found it more becoming to adopt the style of the local notable than frenetically to engage in self-publicity. Many were socially and temperamentally more suited to such a role in life. 'No more ambition,' noted the disillusioned young Boissier de Sauvages, as he shook the dust from his feet on leaving Paris for a career in more sedate Montpellier; 'more repose'.[110] Shunning the glare of publicity could, moreover, be a shrewd economic decision. Publicity could betoken weakness rather than strength in the market, and many solid practitioners had kept up their own and their family's appearances by servicing a solid set of clients acquired by patronage, connection, and custom rather than by advertising. 'Although the profession [of medicine] ... may be more attractive, more brilliant, more lucrative, and more agreeable [in Paris],' a provincial physician noted in 1766, 'I believe that success [there] is more difficult.'[111]

All the same, the *Affiches* clearly demonstrate that by the last years of the Ancien Régime the issue and the substance of involvement in medical advertisement and publicity was broadly accepted both at the heart of the corporative medical community and in its penumbra. This helps to explain the kind of rhetorical presentation which practitioners affected, so as to account for their presence in the public domain. Despite the widespread conviction that patriotic commitment legitimated involvement in the great chain of buying, a defensive tone was still often in evidence. One advertiser in the *Gazette de santé* in 1778 stated orotundly, 'he does not presume to derive either vanity or self-interest from this advertisement; he is animated solely by the aim of coming to the aid of his fellow-citizens'. Similarly a Toulousian apothecary with his eye very much on the main chance, advertised his *véritables pastilles à la Neckre* [*sic*] in December 1788, 'in no way fearing he would be confused with charlatans, whose destruction he desired, and less for his own interest than for the good of the public'.[112] The advertising copy of Enlightenment medicine was the quintessence of a ticklish, if humanitarian, altruism.

Commercialized medicine had tended in the past to cluster around medical conditions which were chronic (rheumatism, gout, skin conditions, etc.) or

[109] From a letter by putative physician Victor Lamothe, June 1766, cited in C. Adams, 'Defining *état* in Eighteenth-Century France: The Lamothe Family of Bordeaux', *Journal of Family History*, 17 (1992), 41.

[110] Source cited above, n. 58. Boissier spent time as municipal physician at Marsillargues before getting a chair in the Montpellier Faculty in 1734.

[111] Cited in Adams, 'Defining *état*', 41. Cf. for England, the prudent economic arguments against commercialism and publicity discussed in J. B. Barry, 'Publicity and the Public Good: Presenting Medicine in Eighteenth-Century Bristol' in W. F. Bynum and R. Porter (eds.), *Medical Fringe and Medical Orthodoxy 1750–1850* (London, 1987).

[112] *Gazette de santé*, 13 Aug. 1778 (suppl.); *Affiches de Toulouse*, 3 and 17 Dec. 1788.

which presented symptoms which inconvenienced normal social life (as with medico-cosmetic treatments).[113] This was still true, though innovatory or unusual treatments and approaches were also now a key selling-point. This was the case, for example, with physicians who were the proprietors or assistants at private institutions with some sort of medical specialism. Infirmaries for the treatment of venereal disease were a case in point. The senile were catered for in *maisons de santé*, which were advertised in several *Affiches*. The hesitation which a number of public authorities expressed as regards smallpox inoculation inside towns led entrepreneurial physicians to open inoculation centres in out-of-town locations. In Paris, a herbalist offered beds for treatment for disease using only herbal remedies. Male accoucheurs joined midwives in advertising lying-in services.[114] Private madhouses, too, were a particularly successful formula for attracting custom. Jacques Tenon in 1788 listed no fewer than seventeen of them in Paris alone, and two proprietors at least, Esquiros and Belhomme, utilized the *Affiches* to advertise their services.[115]

There was also a good deal of involvement by the orthodox medical community in using the press, especially the provincial press, as a vehicle for disseminating information about proprietary remedies. The message could be either laudatory or denunciatory. The *poudre Goderneau*, advertised widely in 1783–4 as a remedy for 'la maladie sociale' (syphilis) was devastatingly assaulted by Mittié and others with a stake in the venereology market and the remedy's owner, chevalier Goderneau, found it hard to shrug off cases of dangerous side-effects as the result of unscrupulous rivals counterfeiting his wares. Similarly in 1783 the *Affiches de Troyes* contained a long polemic after carrying publicity for the anti-syphilitic *eau médicinale* of Husson, which seemed to have caused extensive damage to the stomachs and nervous systems of those who ingested it and may have caused several deaths.[116]

Some of the more old-fashioned medical practitioners clamoured against the licence enjoyed by the provincial *Affiches*, claiming to be scandalized that 'an empiric should through publication [in provincial newspapers] give his remedies a dangerous authenticity that people ready to know and appreciate the truth

[113] This is pointed out by the Montpellier physician Amoreux *fils*, 'Mémoire sur la topographie médicale de Montpellier et de son territoire' (1779), BM Montpellier MS 261.

[114] *Affiches de Evêchés et Lorraine*, 2 Aug. 1781 (the aged); *Affiches de Trois-Evêchés*, 19 Jan. 1771 and *Affiches de la Haute et Basse Normandie*, 24 May 1771 (inoculation); *Affiches de Bordeaux*, 9 July 1786 (herbalist); *Affiches de l'Orléanais*, 1 May 1768; *Affiches des Trois-Evêchés*, 28 Oct. 1780; *Affiches des Evêchés et Lorraine*, 25 Aug. 1785 (midwifery).

[115] Jacques Tenon, *Mémoires sur les hôpitaux* (Paris, 1788); *Affiches de Paris*, 3 June 1776 (Belhomme) and 18 Sept. 1775 (Esquiros).

[116] *Affiches du Dauphiné*, 15 Dec. 1780; *Affiches de l'Orléanais*, 9 Mar., 30 July, 10 Sept., and 1 Oct. 1784; *Affiches de province*, 10 Jan. and 21 Mar. 1784. Goderneau also crops up in ASRM 199 d. 9, d. 13, d. 14. See too the *Recueil de pièces* (BN 8-T18–120), xi.

should be tempted to adopt them'.[117] Editors were aware of the problem and strove to exercise prudence: 'we know how much circumspection is necessary in announcing the recipe to remedies', noted the editor of the *Affiches de Poitou* in 1781, only to go on to cite a quite bogus and utterly unauthenticated remedy for quartan fever.[118] This highlighted a very real problem of quality control confronting editors. Their *raison d'être* seemed to be to bring to light and to circulate the productive forces and innate knowledge and skills of their readers. This pushed them occasionally into even criticizing the idea of proprietary medicines as an unjust privatization of knowledge which should be in the public domain. The general view was, however, that owners of secret remedies could be separated from the out-and-out charlatan by the fact that, as a writer in the *Gazette de santé* expressed it, 'a man with a secret may have the most upright intentions while the charlatan is merely out for dupes'.[119] Many editors included alongside the publicity for proprietary medicines large numbers of 'folkloric remedies' vouched for by persons of trust and which allegedly testified to the *genius loci*. There was a kind of lyricism of novelty and a cult of the inventor for the public good in the pages of the *Affiches* which made them especially receptive to self-proclaimedly new means of assisting in the quest for personal and social health by bringing private or repressed knowledge into the public domain. The *Affiches* vibrated to Enlightenment values of earthy authenticity and moral transparency.

This somewhat paradoxical situation made the provincial press a happy hunting-ground for charlatans out to find clients. If debates on the virtues of particular drugs did sometimes occur, it was almost impossible for a reader to adjudicate them. This was, first, because even quacks of the most outrageous kinds had adopted much of the style of authentication and self-presentation of the orthodox medical community. The role model for the charlatan in print was less likely to be the thaumaturge or the showman, and more probably the learned, academy-attending, empirically alert, and widely sagacious man of learning. Oculists like the chevalier Taylor prided themselves on operating for and on the crowned heads of Europe, and the tendency among all commercially minded operators was to stress position in the medical household of a foreign potentate or major dignitary or else training with a luminary of the medical world: the *orviétan*-seller Bianchi claimed to have been inspired by Italian anatomist Morgagni.[120] Membership of academies and learned societies was often mentioned too. Like good scientists, the emphasis was on long experience and, increasingly, proto-clinical trials which had proven a drug's utility. Certificates of success now came not just from the great and the good but also from licensing bodies and learned societies.

[117] *Gazette de santé*, 28 Nov. 1783. [118] *Affiches de Poitou*, 25 Oct. 1781.
[119] As above, n. 117. [120] ASRM 199 d. 8.

The second reason why it was usually impossible for a reader of advertising copy to adjudicate a remedy's claims was that, if many erstwhile quacks had assumed the trappings of plausible verisimilitude, a great many more members of the orthodox medical community were themselves increasingly adept at commercialization techniques. Medical advertisement and publicity within the burgeoning world of print in the Enlightenment may have had the role of enlarging the medical penumbra: but they had also, as we have seen, energized and transformed the core of the corporative medical community. The old codes of recognition were altering profoundly. Changes in clothing—notably the move from functional dress codes towards a fashion-consciousness which made identification by style of dress increasingly difficult—had made the medical man a less easily recognizable species.[121] So too, the superabundance of print in the Enlightenment, and its association with social utility, had a similar levelling effect.

We see this transformation of the medical field very well if we compare two very different medical figures, the venereologist and court physician Lefebvre de Saint-Ildephont and the illustrious secretary of the Royal Society of Medicine (and also court physician) Vicq d'Azyr. The former led a checkered life, trying his hand as playwright, pornographer, and firework-maker as well as at medicine. In 1776 he had compiled the first 'trade directory' of the medical community, the so-called *État de médecine*. He also proved himself a past master at playing the *Affiches* when seeking to establish the reputation of his *chocolat aphrodisiaque*. Advertisements appeared over the space of several months to advertise his courses on venereal disease and on childbirth; to note that he had received a mission from the government to treat venereal disease gratis in Versailles; to give a change of address; and to announce his book *Le Médecin de Soi-même*, where he pointed out that his chocolates were stocked by a Parisian apothecary who also was a keen advertiser in the *Affiches* and who kept Lefebvre's name even more before the eyes of the public.[122] Yet it no longer sufficed to classify such a figure as an out-and-out quack. As a court physician, he had a solid place within the old corporative world. His assorted activities and modes of self-presentation categorized him as someone with strong claims both to scientific status and to concern for the nation's health. It is instructive to place him cheek-by-jowl alongside another court physician, the far more scientifically reputed and well-connected Paris graduate Vicq d'Azyr, leading light of the

[121] D. Roche, *La Culture des apparences: Une histoire du vêtement (XVIIe–XVIIIe siècles)* (Paris, 1991) on this theme.

[122] For this interesting figure, see, besides the *État de médecine* and the *Médecin de soi-même*, the *Affiches de province* 19 Jan., 1 June, 16 Oct. 1774; 24 Apr., 15 May, 26 June 1775. He is mentioned too in P. Brassart, 'Contribution à l'étude du monde médical versaillais sous le règne de Louis XVI et pendant la Révolution', thesis, Rennes, 1965, pp. 81 ff.

Royal Society of Medicine from its inception in 1778. A stern excoriator of charlatanism in all its forms, Vicq made the activities of the Royal Society of Medicine the most frequently publicized of all learned societies mentioned in the pages of the *Affiches*. He also used the latter to advertise and to organize the financing of his works on anatomy, and he also advertised his private anatomy classes in the press.[123] In the fashioning of a career identity on the medical market-place through publicity and self-promotion, a Vicq d'Azyr ran neck and neck with a Lefebvre de Saint-Ildephont.

These case histories highlight the extent to which medical practitioners of every stamp and background were being drawn into the ambit of the press alongside individuals drawn from the medical penumbra, and the variety of ways in which this could be used for career advancement. The practice of announcing the appearance of new books or reviewing them in the *Affiches* meant that even the most dyed-in-the-wool medical writer could be sucked into this showcase of publicity. Members of the Faculty, coy about promoting themselves too shamelessly, could feel more comfortable with the public endorsement of a medical commodity or drug, which was an established way of attracting the public's eye. The renowned Montpellier professor Fizes, an early exponent of publicity—it was said he staffed the inns of Montpellier with his agents singing his praises for the benefit of travellers needing a doctor—backed the *ratafia purgatif* of apothecary Carquet in advertisements carried in the *Affiches de Bordeaux*.[124] The supply of mineral waters was another branch of medical provision in which physicians played a role as agents of endorsement and publicity. Under the aegis of the world of print, some practitioners could hover too, as we have seen, behind a special skill or expertise. Public courses and private tuition too constituted an accepted means of attracting public attention and, by extension, new clients. Even where entry was free—as with numerous anatomy courses conducted in local hospitals, for example—these could be a good career investment. In 1788 the *Affiches de Paris* carried advertisements for well over a hundred courses, between a fifth and a quarter of which related to medicine (anatomy, surgical operations, illnesses of the eyes, obstetrics, botany, etc.). The tendency for the *Affiches* to carry reports of learned societies was another well-attested method here. Prize-winning essays or reports of anatomical findings were increasingly frequent. When dressed up in the conventional rhetoric of community welfare and personal disinterestedness, even the announcement in the *Affiches* of a physician's or surgeon's change of address could be viewed essentially as a patriotic public service. Long before 1789,

[123] All provincial *Affiches* which we have consulted carry copy on the Royal Society of Medicine. For Vicq's other activities, see *Gazette de santé*, July 1777, and *Journal général de France* (formerly the *Affiches de Paris*), 18 Oct. 1785.

[124] *Affiches de Bordeaux*, 1 Aug. 1765.

therefore, the newspaper—once regarded as solely the preserve of charlatans—had been extensively colonized by the orthodox medical community.

To a certain extent, these developments formed part of the broader remit of the *Affiches*, in helping make eighteenth-century middle- and upper-class society comfortable with the mechanisms and the values of the commercial society in general, and the market for medical goods and services in particular. The enthusiasm which medical practitioners showed towards the publicizing and commercializing potential of print was, moreover, matched by a similar entrepreneurialism displayed by many other literate and professional groupings: lawyers, writers, teachers, and so on. Medical practitioners open to the market also had in common with these other groupings having an investment in the emerging bourgeois public sphere an underlying and unshakeable conviction in the rectitude, patriotism, and civic value of communication and exchange.[125] The world of print constructed a medical market-place—but it also constituted a site within which other groupings within the service sector of the economy could fashion a new identity. It was not simply, in other words, solely material factors to do with more physicians chasing fewer jobs within the corporative community which led to this embracing of the values of commercialism and publicity. If this had been the case, then one would expect support for these processes to be absent at the core of the corporative community. In fact, the opposite was true. The positive values attached to the processes encouraged a good proportion of medical men within both the core and the penumbra of the corporative medical community to seek out ways of learning to live with and love what an earlier age would have denigrated as mere charlatanism. Much associated with the latter had been swallowed up within a medical market-place on which practitioners met on far more level terms than had been the case in the sixteenth and seventeenth centuries.

One consequence of this commitment from *gens de lettres* generally was a shift in the importance of the public in the significance and objectives which medical practitioners ascribed to their art. There was a growing sense of awareness in the importance of public esteem in shaping a medical career: 'The great aren't the people who make the reputation of a physician,' noted Bordeu. 'It's the people whom we need to address ... It is through them that we derive our reputation.'[126] Invocation of the public was more, however, than a career move: the

[125] These arguments are developed at greater length in Jones, 'Great Chain of Buying'; and id., 'Bourgeois Revolution Revivified: 1789 and Social Change' in C. Lucas (ed.), *Rewriting the French Revolution* (Oxford, 1991), esp. 93 ff. For lawyers and the world of print, see S. Maza, *Private Lives and Public Affairs: The Causes Célèbres of Pre-Revolutionary France* (Berkeley & Los Angeles, 1993); and for literate groups more generally, R. Chartier, *The Cultural Origins of the French Revolution*, Eng. trans. (Durham, NC, 1991). For Habermas and the 'bourgeois public sphere', see above, Ch. 6, Sect. D.

[126] *Correspondance*, ed. M. Fletcher (4 vols.; Pau, 1977–9).

very notion of 'the public' was coming to lend an air of legitimacy to any medical endeavour. Claims to speak for and to the public had been prominent in the struggles which, as we have seen, had pitted surgeons against physicians in the 1740s and 1750s. Renouncing the tendency evident in the previous century of assuming that the public was usually wrong on everything, Quesnay, for example, had stated that 'the physicians and surgeons are made for the public, it is the public which rewards them, which makes them their object and which will ensure in society men who devote themselves to the example of medicine and surgery ... It is not the interest nor the rights of the physicians and surgeons which we must envisage in the decision of the case dividing them, but rather public interest.'[127] Yet public interest, in Quesnay's view, still needed to be guided, not least because patients' hopes of cure always blinded them to the exigencies of impartiality. La Mettrie, in his characteristically acerbic satirical tone, was similarly nervous about ascribing too much authority to public opinion: 'the public has rendered study, knowledge, and truth quite useless. How can real physicians be necessary? A physician, like a charlatan, needs only an advertisement [*affiche*]'.[128]

The publicizing and moralizing ethic of the *Affiches* tended to put this pessimistic construction under growing strain. Though some advertisers warned readers to consult a physician in uncertain cases involving proprietary medicine, there was an increasing tendency to let the public decide on its own—in medicine, as in many other spheres of public life. Editors, citing their wide readership and the interactive structure of their product, could now claim that their newssheets embodied public opinion, to which all should bow: the *Affiches*, claimed the editor of the *Affiches de Beauvais*, was 'a kind of public voice which proclaims everything which might interest the different orders of citizens'.[129] 'Giving the public what it wants' could now be represented not as a dangerous or cynical sales manœuvre but rather as an expression of civic spirit, and commercial medicine could be viewed as the most patriotic medicine imaginable. Public support was increasingly viewed as superior to established rank within the orthodox medical community in particular, or the Society of Orders in general. The latter was increasingly denigrated, in fact, as we shall see, as linked with underhand favours and the irrational conduct of courtiers and lackeys.[130] In this way, the commercialization of French society in general over the course of the eighteenth century accentuated the inroads that commercial medicine was making on the

[127] *Examen impartial des contestations des médecins et chirurgiens considérées par rapport à l'intérêt public* (n.p., 1748), 3 f. See too above, Ch. 6, Sect. D.

[128] Ibid.; M.A.R.D.E.M., *Le Chirurgien médecin, ou Lettre au sujet des chirurgiens qui exercent la médecine* (n.p., n.d.), p. 68; [La Mettrie], *Ouvrage de Penelope*, ii. 29.

[129] *Affiches de Beauvais*, prospectus, 1787.

[130] See below, Ch. 12, Sect. E.

traditional values, structures, and hierarchies of the corporative medical community.

E. Medicine in an Empiricist Age

We should not neglect other, related factors more specific to the practice of medicine which contributed to the changing institutional and scientific landscape of the eighteenth century. The progress that the principles of empiricism was making within medical science, especially after mid-century, made the orthodox medical community's attack on alleged quacks as empirics seem rather off-beam. Blégny's definition of empiricism at the end of the seventeenth century as essentially second-class physic was utterly demoded a century later. Citing the venereal treatment trade as a striking example of this more general phenomenon, one anonymous critic in 1773 acerbically noted how 'The Faculty seems to have changed its system; now it runs after all the novelties. There is not a single empirical remedy which does not find protectors and abettors within this body.'[131] Empiricism was *mode du jour* within the medical community as well as on its penumbra.

Empiricism was thus shifting dramatically from the camp of quackery into the domain of socially useful and experientially-oriented science. The story of Gael waters in the last years of the Ancien Régime stand as a parable in this respect. A curative water from the Breton parish of the same name, its therapeutic values against rabies were vaunted by the local priest who, through the provincial intendant, sent a sample to the premier physician François-Joseph de Lassone (1717–88) for his comments, asking his permission to publicize it. 'We must judge it', the latter replied, 'only according to *expérience* ['experiment' or 'experimentation']. As tests on this remedy have shown its effectiveness, it is a service to render it public.'[132]

A parallel development to the valorization of empiricism at the expense of the medical rationalism hitherto so highly prized was a shift in favour of open and egalitarian exchange of medical views and opinions. Enlightened, socially useful medical ideas should, it was held, be allowed to permeate through the whole of society directly and not merely by ricochet from physicians themselves. There were two dimensions to this shift in *mentalité*.

One was a less hierarchical, more egalitarian attitude within the medical community: the views of a surgeon and maybe even an empiric were as socially

[131] *Observations sur la Requête présenté au Roi par la faculté de médecine de Paris contre l'établissement de la Commission Royale de Médecine* (Louvain, 1773), 16. For the movement of ideas in this context, see above, Ch. 7, Sect. B; and for Blégny, Ch. 10, Sect. A.

[132] J. Hervé, 'L'Eau de Gael et quelques anciens remèdes contre la rage en Bretagne', *Mémoires de la Société d'histoire et d'archéologie de Bretagne*, 10 (1929), 169.

useful, and therefore good, as the loftiest Paris doctor-regent. Diderot, typical of many of the *philosophes* in nurturing a certain fondness for the medical penumbra, noted that 'charlatans on the margins of the cities are not without utility; they perform trials. Medicine began and can only perfect itself through empiricism.'[133] Though a great many physicians argued that all treatments should receive full scientific validation, this was easier said than done. As the state of venereology attested, the empirical approach seemed to offer a wide spectrum of different methodological possibilities. Because of this, a good deal seemed to rest upon the personality of the scientist in question. In the universe of the *Affiches*, this emerged in a current of thinking which held that it was the patriotic rather than the scientific credentials which counted the more.

The second, and rather ominous, dimension to the shift in attitudes towards health was the gradual development of a feeling that health maintenance could actually be harmed by the learned medical practitioner who claimed, by dint of his learning, a monopoly over the validation of new and traditional remedies. This tendency would develop apace, as we shall see, in the last years of the Ancien Régime and in the Revolution. In the New Medical World which some were increasingly fervently imagining, citizen should speak openly to citizen—questions of medical expertise were only a secondary consideration. Certain trends within Enlightenment science encouraged this development, most notably perhaps the resurgence of expectant therapeutics. If responsibility for cure lay essentially with Nature, and if the environment rather than the individual was pathogenic, then medical practitioners should limit their intervention in individual cases of sickness and concentrate their attention on cleaning up the environment.[134] With physicians increasingly restrained in their therapeutics, it was little wonder that many patients felt they were on their own. It is perhaps in this light that we should see the continued and growing popularity of medical self-help manuals in the Enlightenment.[135]

These developments did not mean, of course, that Enlightenment medicine had become a commercialized fiefdom or physician-free zone. As we have suggested, there was no shortage of older-style physicians and surgeons who opposed the dual snares of publicity and commercialization as unbecoming for a proud constituent within the corporative Society of Orders. Such individuals

[133] 'De quelques exceptions à la liberté des conditions', in his *Mémoires pour Cathérine II*, in *Œuvres complètes*, ed. R. Lewinter (15 vols.; Paris, 1969–73), x. 778–9. Diderot was also a champion of the unification of medicine and surgery, in the interests of a socially useful science: see esp. his *Lettre d'un Citoyen zélé qui n'est chirurgien ni médecin à M.D.M., maître en chirurgie, sur les troubles qui divisent la médecine et la chirurgie* (Paris, 1748).

[134] See below, Ch. 12, Sect. B; and J. C. Riley, *The Eighteenth-Century Campaign to Avoid Disease* (London, 1987).

[135] See above, Ch. 7, Sect. B.

were among the tenors in the chorus of disdain evinced by the orthodox medical community towards charlatanism which we have earlier evoked. Yet as a study of the provincial press demonstrates, there was no Maginot line separating orthodox practitioners from charlatans. Indeed, one may suggest that the shrillness of the attack on charlatans owed something to a sense among physicians that the clarity of the distinction between licit and illicit practitioners was being undercut not only by commercializing processes and the changing volume of medical qualification, but also by the disciplinary and epistemological changes medical science was undergoing. The sources and locales of medical authority were under question. And the crusaders against charlatanism were an anxious crew, less confidently seeking the extirpation of a clearly defined group of outsiders than signalling a *fin-de-siècle* crisis of medical identity.

11

THE HOSPITAL IN THE ENLIGHTENMENT

A. The Discovery of the Hospital

Although the development of an experientially orientated medical science over the course of the eighteenth century and the changing shape of the sociology of medical practice undoubtedly raised awkward questions about the privileged cultural and social status of the graduate physician, the faculty doctors and professors in the vanguard of the epistemological revolution would never have admitted that the distinction between the learned practitioner and the humble empiric was becoming irredeemably blurred. It might be the case that true medical knowledge, especially therapeutic knowledge, could now only be gained through experience, but not all experiences carried equal weight. 'Everyone sees,' noted the vitalist Barthez in the preliminary discourse to his therapeutic lectures at Montpellier, 'but not everyone observes.'[1] The empiric collected data simply and casually, but the new medical science was to be formed from 'a body of reasoned empiricism' which could only be compiled by the discerning graduate physician.[2] There was a good deal of emphasis on the qualities of character and perception of the individual who collected empirical data and made it the raw material of his proofs. The traditional emphasis on the physician's possession of 'studies, principles, and character'[3] seemed all the more called for in a period like the Enlightenment which, though prizing the evidence of the senses, was fraught with anxiety about the vitiation of sense perception: sight was capable of a *trompe-l'œil* effect, so that scientific demonstration risked becoming conjuring or juggling; information, misinformation; and truth, imposture.[4]

The attempt to mark out a dividing-line between sound and unsound empirical knowledge tended therefore to place a lot of weight on the character of the

[1] BM Montpellier MS 256, Barthez. 'Cours de thérapeutique' (n.d.), fo. 6. For the development of the new experientialist medical science, see above, Ch. 7, Sect. C. Thus a Vicq d'Azyr really was *not* a Lefebvre de Saint-Ildephont: see above, pp. 664–5.

[2] Barthez, 'Cours de thérapeutique', fo. 12.

[3] Cf. above, Ch. 4, Sect. A.

[4] These themes are very interestingly illuminated in two recent studies by B. M. Stafford: *Body Criticism: Imaging the Unseen in Enlightenment Art and Medicine* (Cambridge, Mass., 1993), and *Artful Science: Enlightenment Entertainment and the Eclipse of Visual Education* (Cambridge, Mass., 1994), esp. ch. 3, 'Laboratory Games'.

scientist in handling tricky and deceptive empirical data. The distance between core and penumbra was kept as wide as it was by highlighting moral qualities rather than fundamental differences in method. Neither Barthez nor any other professorial champion of the new medical science in the last decades of the Ancien Régime ever seem to have explained to their students how the data for the new science was to be actually accumulated. Barthez talked airily about following the lead of the Newtonian astronomers and forming no hypotheses until an unimpeachable body of data had been acquired, but he offered no methodology for data collection: his account of the development of the new medical science remained at the level of rhetoric.[5]

The emphasis on the role of the reliable, trustworthy witness as a guarantor of scientific veracity thus signalled an absence of consensus within the faculty as well as a failure to articulate a detailed picture of what a fully acceptable empirical method amounted to.[6] Everyone might agree that what was needed was a multiplicity of experiences and experiments (in French, the same word, *expériences*, covered both concepts). Everyone might agree too that the exemplary experiential physician was Hippocrates. But there was no agreement as to how many or how few experiences would suffice to produce a solid conclusion, nor whether all types of experience were equally fruitful. This was an age in which the science of statistics was in its infancy and graduate physicians could only grope uncertainly over the problems of conducting clinical trials. Nor had they any common idea which of the several locales in which patient and practitioner met face to face was best suited to collecting data. It is quite clear from the published and manuscript material that the pioneers, as distinct from the faculty rhetoricians, of the new medical science collected their observations haphazardly. The utterly and delightfully disorderly pot-pourri of observations in Boissier de Sauvages's notebook aptly illuminates this point: the Montpellier professor collected data at the bedside of private clients, out in the field at a time of epidemic, in hospital wards, in the dissection theatre, in students' lodgings, in the nursery of his own children, watching his cats, and (following a characteristic Enlightenment penchant for self-observation) reclining in the bathtub or in bed.[7]

No medical space was privileged, then, and the enthusiast for the new medical science made his observations wherever he found himself. In such circumstances, research methodologies were necessarily unformed and often

[5] 'Cours de thérapeutique', fo. 17.

[6] The role of 'witnessing' as a principle of scientific validation in this period was first highlighted by S. Shapin and S. Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life* (Princeton, 1985).

[7] AD Hérault 10F51. For medical self-observation and self-experimentation, see Stafford, *Artful Science*, 170 ff.

incoherent. Moreover, as there was no collective research strategy, the discoveries of others were immediately suspect if they challenged the conclusions of a physician's medical heroes. Thus, Lépecq de la Cloture, an admirer of Bordeu, could dismiss De Haen's critique of the Frenchmen's view of the prognostic potential of the pulse on the grounds that the Viennese doctor had seen too few patients. Yet in the same breath the Rouen physician could attack those who made themselves slaves of data collection. Boerhaave, for instance, was criticized for observing a patient's eyes with a magnifying glass, which was judged completely unnecessary. Lépecq de la Cloture himself placed a great emphasis on the role of genius: the great observer was an artist who instinctively grasped the significance of what he saw.[8]

However, if there had been few moves to establish or promote a common research methodology before the outbreak of the Revolution, there had been a belated attempt to privilege a particular locale. From the mid-1780s a powerful group of French physicians, figures very much at the forefront of the new medical science and whose activities have been continually referred to in earlier chapters, began to promote the hospital as the institution in which true medical knowledge could be forged. Inevitably one of the leaders of the group was secretary to the Royal Society of Medicine, Félix Vicq d'Azyr, whose commitment to the cause was fully displayed in the general plan for medical reform that he was to present in the Society's name to the Revolutionary Health Committee (Comité de Salubrité) in 1790.[9] The hospital, Vicq and his friends argued, would allow a new medical science to be created with the minimum delay. Thanks to the large number of inmates, the gamut of diseases from which they suffered, the passivity of the patients, and the possibilities of performing dissection, a huge data bank could be built up in a matter of years. The Paris-trained physician Pierre-Jean-George Cabanis, writing just before the Revolution, believed that if a dossier was kept on every patient a complete medical record would have been established in twenty years.[10] For the same reasons, the reformers insisted that the hospital should be the training-ground of new physicians, not just the site of the creation of new knowledge. Medical students needed hands-on experience that the hospital could ideally supply. According to the Paris doctor Nicolas Chambon de

[8] *Observations sur les maladies épidémiques, ouvrage rédigé d'après le tableau des épidémies d'Hippocrate, et dans lequel on observe la meilleure méthode d'observer ce genre de maladies* (Paris, 1776), 'Discours préliminaire ou introduction'. Barthez would not have agreed with this emphasis on genius: 'Cours de thérapeutique', fos. 1–2: Stahl, he told his students, was a genius—but not such a good doctor as Hoffmann or Boerhaave.

[9] Vicq d'Azyr, 'Nouveau Plan de constitution pour la médecine en France', *Histoire et Mémoires de la Société Royale de Médecine: Années 1787–1788*, 9 (1790), *passim*. On the Royal Society of Medicine, see esp. below, Ch. 12, Sects. D and E; and for the 'Nouveau Plan', below, Conclusion, Sect. C.

[10] 'Observations sur les hôpitaux', in id., *Œuvres complètes* (5 vols., Paris, 1823), ii. 346.

Montaux in 1787, following a doctor on his private rounds was an inadequate substitute, for in an individualistic state like France private patients would resent and resist the presence of trainees.[11] Ideally, according to the Rochefort physician Joseph-Michel Dulaurens, writing in the same year, the faculties should be integrated into the hospitals. If this were not possible, then Cabanis envisaged students serving a period of time in a hospital before they moved on to the schools.[12]

It is not difficult to see why some of the most dynamic physician-reformers began to privilege the hospital in this way. Leading French hospitals had long been centres of surgical training and research, and had influenced medical students as well as apprentice surgeons;[13] physicians in post were already beginning to run their own idiosyncratic trials and offer clinical experience to medical students; while all over Europe the institution was steadily gaining favour as a locus of instruction and knowledge. Indeed, its dual role was already well established in a number of European cities, notably London, Edinburgh, and Vienna, and in the francophone world it was physicians with Austrian contacts who first promoted the institution in print.[14] In large part, this general development reflected the fact that the hospital was the ideal institution for the location of the new medical science. If medicine was ever to become a sophisticated observational science with a clear methodology, be it one dependent on or independent of natural philosophy,[15] it needed a specific institutional space in which to mature—something in some way equivalent to the observatory and the laboratory. The hospital fitted the bill admirably, potentially providing a closed, controlled space where the physician could scrutinize, investigate, and experiment upon the bodies of the sick poor, untrammelled by any outside interference, natural or human. Other environments in which patient and practitioner met, it was argued, were too unstable. Thus, as Lépecq de la Cloture realized only too well, the epidemic doctor could observe the poor in life but not in death, for the rela-

[11] *Moyens de rendre les hôpitaux plus utiles à la nation* (Paris, 1787), 232–3.

[12] *Essai sur les établissemens nécessaires et les moins dispendieux pour rendre le service des malades dans les hôpitaux vraiment utile à l'humanité* (Paris, 1787), esp. ch. 13.

[13] For surgeons, see above, Ch. 9.

[14] For the European context, see O. Keel, 'Cabanis et la généalogie épistémologique de la médecine clinique', Ph.D. diss., McGill Univ., Canada, 1977; G. Risse, *Hospital Life in Enlightenment Scotland: Care and Teaching at the Royal Infirmary of Edinburgh* (Cambridge, 1986); and S. C. Lawrence, 'Science and Medicine at the London Hospitals: The Development of Teaching and Research, 1750–1815', Ph.D. thesis, Univ. of Toronto, 1985. See also Georges-Christophe Wurtz, *Mémoires sur l'établissement des écoles de médecine pratique à former dans les principaux hôpitaux civils de France à l'instar de Vienne* (Paris, 1784); and Samuel-Auguste-David Tissot, *Essai sur les moyens de perfectionner les études de médecine* (Lausanne, 1785). Würtz was a Strasburg professor with Austrian contacts, while Tissot had given hospital-based instruction at Pavia in Austrian-controlled Lombardy.

[15] This was a point which divided the medical establishment in the decades before the Revolution, it will be recalled: see above, Ch. 7, Sects. B, C.

tives of the departed refused permission to have their loved ones dissected.[16] Hospital patients, in contrast, were captives rather than clients: Chambon de Montaux was insistent that the institutionalized poor had a duty to be of service to medical science in return for their long-term care.[17]

It would be crass, however, to see the appeal of the hospital simply in terms of perceived scientific need, especially in the French case. It was also an ideal institution for maintaining the traditional distinction between the empiric and the learned practitioner. To a novel and growing degree in the eighteenth century the charlatan and the physician encountered their patients within the same social space in the wider world. The hospital, however, was different in that it constituted a medical site free from the pressures of the market-place and from which the empiric could be largely excluded.[18] By privileging medical knowledge acquired within its portals and prioritizing its role in medical education, the reformers of the 1780s were safeguarding the physicians' status in the new empiricist environment, as well as stabilizing empirical knowledge and experiential learning. Practitioners would continue to be divided into two groups, no longer into dogmatics/rationalists and empirics, but according to whether or not they had received hospital training. The hospital was henceforth to have a monopoly on the manufacture of sound medical experience, even if there was as yet no carefully articulated methodology of knowledge creation.

Arguably, moreover, by privileging the role of the hospital, the reformers hoped to extend the physicians' authority over their patients as well as their rivals. The notorious independence of the affluent sick ill fitted the enlightened physician's dignified view of his calling. Whether his patient were prince or pauper, it was the physician's duty to override subjective prejudice and provide the best possible care. A mechanism had, therefore, to be found, whereby a new generation of physicians could break free of the tyranny to which their knowledgeable patients subjected them. Hospital-based training provided an answer. If physicians had spent their formative years watching objective men of science treating with magisterial aplomb a bevy of grateful, deferential paupers, it could be expected, on quasi-Lockean grounds, that they would internalize a concept of patient–practitioner relations that would make them far less ready to collude in the prejudices of their clients in the outside world. Hospital training was thus *de rigueur* for the formation of a good physician, not just because it gave him essential practice in patient-care, but because it would encourage him to take his own decisions and stick to them.[19]

[16] *Observations*, 185. In consequence, he was unable to demonstrate that the epidemic he was sent to counter in the hamlet of Gros-Theil in 1770 was verminous. See above, Ch. 7, Sects. B, C.

[17] *Moyens*. [18] See below, Ch. 11, Sect. C.

[19] See L. W. B. Brockliss, 'Medical Reform, Enlightenment and Physician-Power in Late Eighteenth-Century France', in R. S. Porter (ed.), *Medicine in the Enlightenment* (Amsterdam, 1995), 93 f.

The idea that the hospital could be the location of instruction and medical learning, and a means of stabilizing medical authority, had of course a brilliant future.[20] From the 1790s hospital medicine in Paris in particular would be celebrated throughout Europe as the location of the 'birth of the clinic', the cynosure of a scientific, or clinical, modern medicine. In the 1780s, however, the French hospital was far from being the institution of the reformers' dreams. It was not a neutral space eagerly awaiting the epiphany of scientific method, but—as the reformers soberly realized—an independent institution with its own long and complex history, which the graduate physician had still to colonize effectively.[21] The reformers had identified the hospital as the source of medicine's future triumphs, invented its future role, but not yet taken full possession of the freehold. As the present chapter will demonstrate, although the hospital was becoming increasingly 'medicalized' in the course of the century, to adapt Kant's famous judgement on the era, the hospital of the Enlightenment and the enlightened hospital were not one and the same.

French hospitals towards the end of the Ancien Régime numbered roughly 2,000 in all, at a time when in neighbouring England, for example, whose hospital map had been denuded by the Reformation, scarcely a dozen hospitals were in existence (see Table 11*a*).[22] Over two-thirds of these institutions were small, multi-purpose establishments housing less than five or six paupers at a time. The urban *hôtels-dieu*, in contrast, which specialized in medical care for the classifiably and curably sick, made up a fifth of the total, and contained about the same proportion of hospital capacity. Over half of hospital inmates were lodged in the big *hôpitaux généraux* established from the middle of the seventeenth century, as we shall see below, as part of a massive overhaul of the nation's poor laws. In them—as in the other types of civilian hospital—religion and repression, piety

[20] For this background, see the classic E. H. Ackerknecht, *Medicine in the Paris Hospital, 1794–1848* (Baltimore, 1967), which is given a rather different twist in M. Foucault, *Naissance de la clinique: Une archéologie du regard médical* (Paris, 1963), trans. as *The Birth of the Clinic: An Archaeology of Medical Perception* (London, 1973). By focusing on the allegedly innovatory character of the 1790s, these authors underplay pre-1789 developments. For a more general survey, see C. Jones, 'The Construction of the Hospital Patient in Early Modern France', in N. Fintzschze and R. Jutte (eds.), *The Prerogative of Confinement* (Cambridge, forthcoming), on which the present chapter draws.

[21] Hence many of the pamphlets extolling the possibilities of the hospital also included plans for sweeping internal structural reforms: e.g. Dulaurens, *Essai*, chs. 2–12. Dulaurens claimed that his attempt to walk the wards of the Paris Hôtel-Dieu (presumably *c.*1750) had proved a failure, and that he had been unable to see any female inmates: ibid. 12 f.

[22] See above, Ch. 4, Sect. C. Hospital statistics are drawn from M. Jeorger, 'La Structure hospitalière de la France sous l'Ancien Régime', *Annales ESC*, 32 (1977), 1025–51. For England, cf. N. I. Orme and M. Webster, *The English Hospital, 1070–1570* (London, 1995); and C. Webster, 'The Crisis of the Hospitals during the Industrial Revolution', in E. G. Forbes (ed.), *Human Implications of Scientific Advance: Proceedings of the 15th International Congress of the History of Science* (Edinburgh, 1978).

TABLE 11a. *The hospital structure of eighteenth-century France, according to Jacques Tenon*

	No.	%	Capacity (%)
hôpital	1,398	71.2	27.1
hôtel-dieu	387	19.8	19.6
hôpital général	176	9.0	53.3
TOTAL	1,961		

Source: M. Jeorger, 'La Structure hospitalière de la France à la fin de l'Ancien Régime', *Annales ESC* 32 (1977). The article is based on estimates drawn up by surgeon Jacques Tenon for the Committee of Public Welfare in 1791–2, and is lodged in the BN at Nouvelles acquisitions françaises MS. 22 743. Tenon lists 2,326 hospitals in all, but Jeorger claims 1,961 civilian hospitals with beds are traceable in all. Figures for hospital capacity are figures provided by some 61 per cent of this figure, and amounted to 86,252 beds. An overall figure of hospital capacity in excess of 100,000 persons by the end of the Ancien Régime thus seems highly probable and this does not include foundlings cared for by hospitals outside institutional walls.

and state welfare policy were closely intertwined. This tended to make their use for these new medical purposes difficult, and to problematize the environment in which medical training occurred.

An institution more attuned to the needs of the physician-reformers, and one that must have been an important influence on their thinking, was the military hospital. Established for the first time in any numbers in the course of the century, military hospitals were a vision of the future: their inmates were limited to the sick, the religious imperative was less in evidence, and they provided facilities for teaching and research. To the extent, moreover, that they were also a formative influence on civilian hospitals over the century, they ensured that the physicians' dream was grounded in some sort of reality. Nevertheless, that influence was always limited and most civilian hospitals on the eve of the Revolution continued to present a highly traditional and sometimes grisly image to the critical eye of the enlightened public. Indeed, such was the 'Black Legend' which stuck to them at the end of the Ancien Régime that some medical reformers even switched tack altogether and began to argue that the home rather than the hospital was a more untrammelled, and less unhealthy, site for medical purposes. And there were plenty of enlightened voices outside the medical sphere who by 1789 were envisaging the abolition of the institution entirely. In consequence, the reformers had nailed their colours to a tottering mast. Searching for an institutional focus for the creation of a new medical science that could also be used to maintain their social and cultural position, they had lighted on a traditional institution, which, though undergoing development, might well have days which were numbered. Only with hindsight was the evolutionary history of the hospital 'inevitable'.

B. From Plague to Poverty: Hospitals and the 'Great Confinement of the Poor'

As we saw in Chapter 6, the state's contribution to the defeat of plague had been an unremitting commitment—evident from the middle of the seventeenth century, though only reaching its apotheosis at Marseilles in 1720—to measures of administrative containment and confinement.[23] Since the strategy of cordons sanitaires and hermetic isolation of plague-affected areas and groups promised measured success in the secular struggle against epidemics, it seemed logical to think that confinement of recalcitrant and obdurately lawless paupers and deviants might offer a means of restraining the endemic turbulence which beset the French state in the aftermath of the Wars of Religion.

Since the early sixteenth century, as we have seen, town authorities had acted to reform and rationalize their poor-relief policies so as to cope with the needy, contagious, feckless, and idle poor.[24] Many ambitious localist welfare schemes had, however, gone to the wall in the anarchic and destructive decades of France's Wars of Religion, and the accompanying social strife, which was prolonged well into the seventeenth century. It was often local groups of Catholic activists—such as the numerous branches of the clandestine and élitist Company of the Holy Sacrament—who led the campaign to regenerate poor relief. From 1630 this organization determined to work towards the establishment of general hospitals (*hôpitaux généraux*) as the best means of proselytizing the poor into sound behaviour and religious orthodoxy. The rationale was that confinement of all the needy—both defenceless paupers (the aged, infirm, orphans, foundlings, etc.) and dangerous and delinquent marginals requiring stern moralization—could produce a reformation of manners among the poorer classes as a whole. The social danger the poor represented—these decades were marked by frequent social and political turbulence—seemed a further plea for action.[25] The strength of the argument for confinement was highlighted by the frequent equation of dangerous forms of poverty with contagious disease. In Autun, for example, it was the fear of hordes of outside paupers introducing plague into the community which led to restrictions in 1668 on the great bread dole which the cathedral chapter had made to the poor for nigh on a millennium (since 677).[26] Just as the plague victim was to be ruthlessly cut off

[23] See above, Ch. 6, Sect. A. [24] See above, Ch. 4, Sect. C.

[25] Cf. above, Ch. 1, Sects. C and D. For the 'Great Confinement', a key text is M. Foucault, *Folie et déraison: Histoire de la folie à l'âge classique* (Paris, 1972) (1st pub. Paris, 1961)—though Foucault exaggerates the actual impact of the policies in rounding up the poor. J. P. Gutton is a sounder guide on this aspect: see his *La Société et les pauvres: L'Exemple de la généralité de Lyon (1534–1789)* (Paris, 1971), esp. 326 ff., 394 ff.; and id., *La Société et les pauvres en Europe (XVIe–XVIIIe siècles)* (Paris, 1973), 122 ff. Helpful too is J. Imbert, *Le Droit hospitalier de l'Ancien Régime* (Paris, 1993), esp. 98 ff. More generally, see A. Tallon, *La Compagnie du Saint-Sacrement (1629–1667)* (Paris, 1990).

[26] C. A. Desplaces de Charmasse, 'L'Institution charitable de l'aumône Saint-Léger à Autun, 677–1668', *Mémoires de la Société eudéenne*, NS 17 (1889), 374.

from normal intercourse, the thinking ran, so the confinement of dangerous and contagious paupers would spare civil society from a source of rank moral and physical contagion. Thus the establishment of an *hôpital général* at Pau in 1678 was justified as an attack on 'roguery' (*gueuserie*), a kind of multiform disorderliness:

> this plague [*sic*] as pernicious to the soul's health as to the life and health of men's bodies ... produces and maintains all kinds of corruption of humours and of faith and multiplies all sorts of crimes, thefts, larcenies, drunkenness, blasphemous gambling, impiety, and all kinds of impurity and disorderliness.[27]

The *hôpital général* idea had been around for some time—the Charité Hospital at Lyons had been founded on these lines in 1614[28]—and the 1630s saw the beginning of other similar local initiatives. It was in the 1650s, however, that the central government formally made the seclusion of the poor its own medicine for poverty. The Paris Hôpital Général created in 1656–7, into which were swept a diverse range of paupers and deviants, became the archetype of institutions whose establishment was decreed in all the major towns and *bourgs* of France by a royal edict of 1662. Interestingly, though government propaganda evoked moral and religious rationales, it also placed high value on economic arguments for confinement: the productive potential of a confined and disciplined workforce seemed attractive to government officials in the orbit of arch-mercantilist Jean-Baptiste Colbert, Louis XIV's principal minister from the early 1660s until his death in 1683.[29]

Though incorporated into the state's strategic policy from the 1650s, the *hôpital général* institution only took solid root nationally from the late 1670s and 1680s, when the government buckled down to the task of initiating reforms, coordinating confinement policies, providing publicity to explain the best means of establishing these institutions, and sponsoring what we might call the technicians of confinement.[30] Crucial among the latter was an indeterminate royal official, Calloet Querbrat, who called himself *avocat général des pauvres* and acted as information network and propaganda source for a number of roving state emissaries, notably the Jesuit fathers Chaurand, Guevarre, and Dunod, who stimulated local bodies into action.[31] These figures placed great emphasis

[27] AD Pyrénées-Atlantiques, Archives hospitalières de Pau E51.

[28] Gutton, *Société et les pauvres*, 300 ff.

[29] C. W. Cole, *Colbert and a Century of French Mercantilism* (2 vols.; New York, 1939); and J. K. J. Thomson, *Clermont-de-Lodève 1633–1789: Fluctuations in the Prosperity of a Languedocian Cloth-Making Town* (Cambridge, 1982), esp. 132 ff.

[30] For this phase of the confinement campaign, see Gutton, *Société et les pauvres*, 394 ff.

[31] The travels of the Jesuit 'technicians' of confinement are thoroughly covered in C. Paultre, *De la répression de la mendicité et du vagabondage en France sous l'Ancien Régime* (Paris, 1906), 225 ff. For a local case-study—the diocese of Montpellier—cf. AD Hérault G1353. They authored a work, much-repr. in a form adapted to the place they were working, entitled *La Mendicité abolie*, and explaining the rationale for the *hôpital général*: see e.g. *La Mendicité abolie dans la ville de Manosque par l'Hôpital Général ou Maison de Charité* (Aix, n.d.).

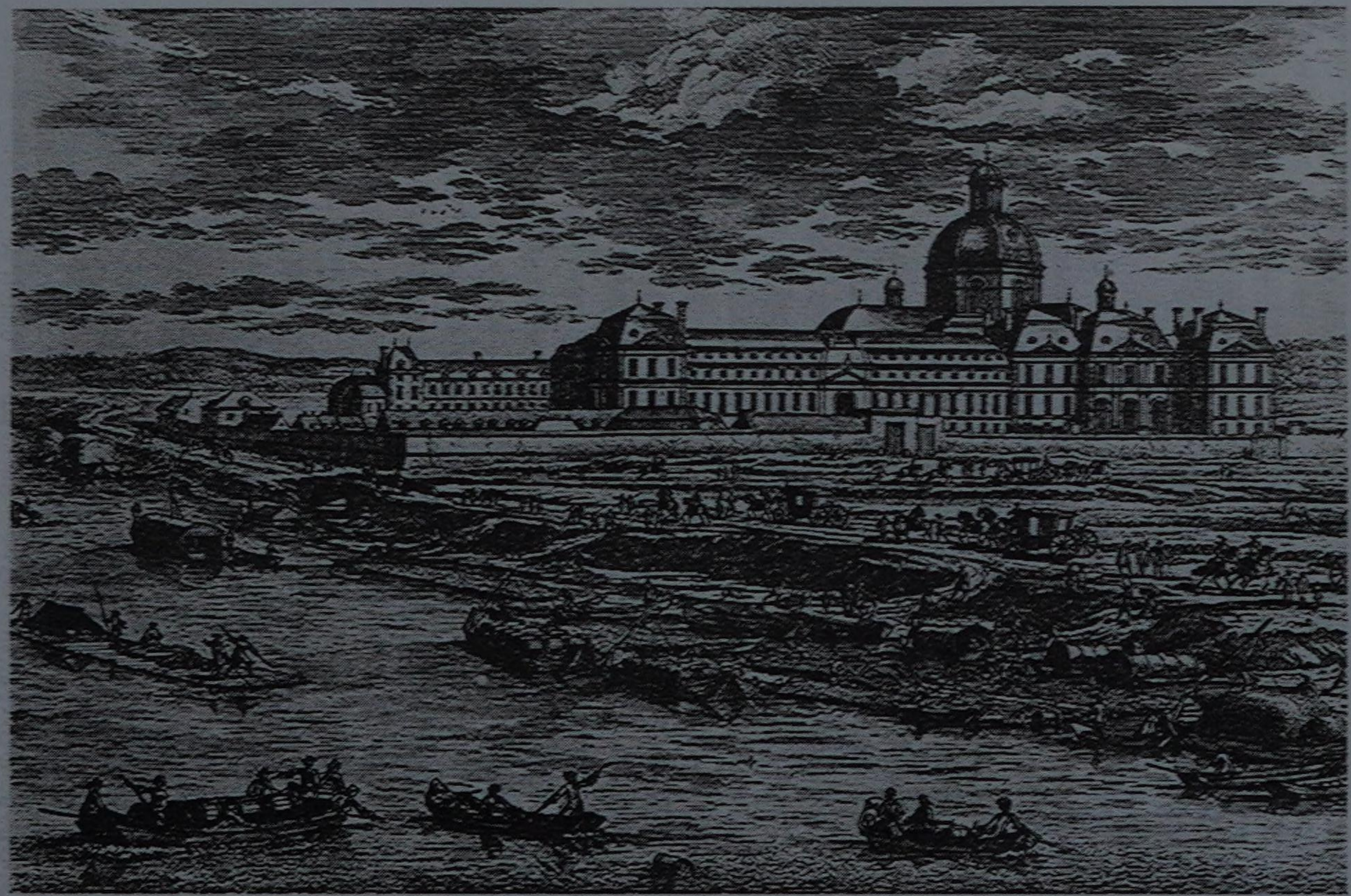


ILLUSTRATION 20. Hôpital de la Salpêtrière, late seventeenth century. La Salpêtrière was the main female wing of the Paris Hôpital Général, created in 1656–7, to which paupers, delinquents, and insane women were admitted. Built on the south-east confines of the city, its chapel, designed by Mansart, stood as a reminder of the incorporation of post-Tridentine piety in the process of the 'Great Confinement of the Poor'.

on the fiscal advantages of confinement to urban élites: by stimulating local charity, the costs of establishment could be minimized; by ensuring inmates worked, the institutions could not only be self-sufficient but even help the locality's balance of trade; while the confinement of the poor would also mean that the 'charitable tax' imposed on the rich by street-begging would cease. In addition, the educational dimension of the *hôpital général* would ensure that paupers emerged from within it better Christians and more docile and less rumbustious subjects. Streets cleared of the moral contagion embodied by beggars and down-and-outs would also be less physically health-threatening for the social élite. As a proponent of the Hôpital Général at Metz put it,

> everything in these institutions, as in the best regulated monasteries, is clean, whereas formerly beggars lodged in stinking and infected holes, and were the first to be attacked by contagious diseases, and communicated them to the wealthy by creeping amongst them in the streets, in the churches, and at their doors.[32]

Significantly, Calloet Querbrat was also involved in projects to diffuse cheap proprietary remedies among the rural population: confinement and its ancillary welfare policies constituted a blow for social and moral hygiene.[33]

By the 1680s state confinement policy was firmly in place, and it provided the main lines of force for governmental social policy until the middle of the eighteenth century. The scale of the operation was considerable. By the turn of the century it was being claimed that over one hundred *hôpital général* institutions, modelled on the Parisian prototype, had been established throughout France. The movement continued well into the eighteenth century, especially in connection with the royal declaration of 1724 on begging and mendicity. Provins only had an *hôpital général* from 1743, Metz from 1738. By 1789 the population of France's network of 176 *hôpitaux généraux* had probably far in excess of 60,000 individuals dependent upon them.[34]

The intellectual force and economic appeal of the movement were such, moreover, that the new institutions sucked in other forms of perceived social or political threat. Thus, for example, the confinement model—already in place, of

[32] AD Moselle H 4677.

[33] See esp. BN MS FR 6801; and *L'Hospital Général Charitable* (n.p., 1657) and *Avis très-important de l'Avocat Général des pauvres procureur des missionnaires qui établissent les Hospitaux généraux à la Capucine suivant les ordres du Roi* (n.p., 1685 edn.), BN MS FR 21804.

[34] AD Seine-et-Marne, Archives de l'Hôpital Général de Provins, A2; R. Bolzinger *et al.*, 'L'Hôpital Saint-Nicolas de Metz avant la Révolution', *Histoire des sciences médicales*, 13 (1979), 371. Other late-comers included Lille (1739), Valenciennes (1753), Douai (1756). For the spread of *hôpitaux généraux*, cf. Paultre, *Répression de la mendicité*, 222–5 (citing a figure of 104 institutions created between 1678 and 1686). For the hospital structure generally, see above and Table 11*a*. The statistics in Jeorger, 'Structure hospitalière' suggest a total *hôpital général* population of roughly 60,000 in the late 18th cent., though this does not include the foundlings being wet-nursed in the countryside, which would guarantee a very much higher dependency ratio.

course, as regards plague victims—was extended to women with unorthodox sexual mores (notably by legislation in 1684 relating to the power of the public authorities and of the paterfamilias to order confinement). The Revocation of the Edict of Nantes in 1685 outlawing the Protestant religion led to children of Huguenots being confined in *hôpitaux généraux*, while their parents were either exiled, imprisoned, or executed. Gypsies too (notably by legislation in 1682) were subject to this form of seclusion. Changes in the law relating to witchcraft and sorcery in 1682 also led to women who in earlier times would have been executed as witches being considered as impostors or as mentally deranged and being shut away in *hôpitaux généraux*. A wave of provision for the insane within or on the margins of the new world of confinement also witnessed to the force of the arguments for institutionalization.[35]

The so-called great confinement of the poor (*grand renfermement des pauvres*) is often represented as a triumph for the absolute authority of the 'Roi Soleil'. It probably owed its success less to the strength of the king's word, however, than to the ability of his administrators to elicit a powerful response from local *dévot* élites and corporative interest groups. As William Beik has suggested, the last decades of the seventeenth century witnessed a thoroughgoing reorganization of the power-relationships between state and social élites, centre and periphery.[36] Just as newly emergent provincial élites extracted benefits from changed legislative and fiscal structures of the state, so they also utilized the social policies sponsored by the monarch for their own advantage. The technicians of confinement, supported by royal intendants and subdelegates, might stimulate, but on occasion had to restrain, the local energies exhibited by ecclesiastical dignitaries and urban élites.

The seal was set on the alliance between bureaucratized monarchy and local élites in the realm of social policy by the award to individual *hôpitaux généraux* of royal letters patent. This royal warrant outlined the main forms of institutional income and other juridical privileges as well as listing the administrative board which governed each *hôpital*. The religious character of the institutions was highly visible, as one would expect, given the close links between throne and altar in the Louis-Quatorzian polity: local religious activists played a key part in the establishment and day-to-day running of such hospitals, which were

[35] For women, see C. Jones, *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989), ch. 7, esp. 242–3; for gypsies, M. de Vaux de Foletier, *Les Tsiganes dans l'ancienne France* (Paris, 1961); for witches, R. Mandrou, *Magistrats et sorciers en France au XVIIe siècle: Une analyse de psychologie historique* (Paris, 1968), 466 ff.; for Protestants and the insane, see below, pp. 713 and 709–11 respectively. For the inmate population generally, cf. Imbert, *Droit hospitalier*, 181 ff.; and Foucault, *Folie*, 97 ff.

[36] *Absolutism and Society in Seventeenth-Century France: State Power and Provincial Aristocracy in Languedoc* (Cambridge, 1985).

drenched in routine piety; the institutions' income had a strongly religico-charitable character; and the incumbent bishop was normally ex-officio chair of the administrative board. The architectural centrality of the institutions' chapel told a religious story. Yet despite this spiritual patina, it was the local laity who dominated the institutions. The board of *hôpitaux généraux* comprised delegates from the most prestigious of local corporative bodies, and a royal edict of 1698 relating to all other hospitals without letters patent introduced a similar administrative framework for them too. As Louis XIV's councillor of state Henri d'Aguesseau insisted, 'the administration of hospitals is secular', and though bishops played a role, local justices ensured they did not step beyond the bounds of constitutional propriety.[37] If religion pumped through the arteries of this new network of poor-relief institutions, its brain was secular and localist.

The localist orientation of the institutions was also apparent in their long-term evolution. In particular, the repressive tasks assigned them by the central government became less and less significant as time went on, and local interests triumphed. This colossus of governmental social policy had feet of clay. Despite the cold symmetries and normative intent of royal proclamations, the *hôpitaux généraux* never achieved the aim of secluding the bulk of the dangerous classes of 'the Classic Age'.[38] Only sporadically did they even operate as penal institutions with a significant impact on the world of the poor. In Paris, they formed part of the *lieutenant général de police*'s strategy for controlling the organized criminal underworld. In France as a whole, too, they were utilized as part of the national campaign against begging and vagrancy from 1724, serving as reception centres-cum-workhouses for the vagrant classes. Government funding for this purpose ceased in 1733–4, however, and most *hôpitaux* wound up their policing operations forthwith.[39] Thereafter, hospital administrators and local élites proved remarkably recalcitrant about their institutions being used for non-local and repressive tasks. There was a renewed if subdued attempt to use the *hôpitaux* for internment purposes in 1748–50, but from that time onwards the government despaired of using them in campaigns of social discipline.[40]

[37] Correspondence relating to the hospital at Collet in AD Lozère H456. For hospital board composition, cf. Imbert, *Droit hospitalier*, 211 ff.

[38] Cf. M. Perrot (ed.), *L'Impossible Prison: Recherches sur le système pénitentiaire au XIXe siècle* (Paris, 1980) for discussions of Foucault's work on these lines.

[39] J. P. Gutton, *L'État et la mendicité dans la première moitié du XVIIIe siècle (Auvergne, Beaujolais, Forez, Lyonnais)* (Lyons, 1973); R. M. Schwartz, *Policing the Poor in Eighteenth-Century France* (Chapel Hill, NC, 1988), esp. ch. 3; and, for Paris, cf. A. J. Williams, *The Police of Paris, 1718–1789* (Baton Rouge, La., 1979).

[40] Crucial for anti-vagrancy policy around mid-cent. is the collection of policy documents in BN MS FR 8129. See too T. Adams, *Bureaucrats and Beggars: French Social Policy in the Age of Enlightenment* (New York, 1990); and I. Cameron, *Crime and Repression in the Auvergne and the Guyenne, 1720–1790* (Cambridge, 1981).

Despite the rhetorical flourishes accompanying the institution and operations of the *hôpitaux généraux*, therefore, their role as normative agencies within French society has been much exaggerated. What seems clear, moreover, is that their institutional agenda was localist in scope—as was their funding. The disciplinary scope of the institutions was often meagre, limited usually to internal rather than external action, and it smacked more of religious penitence than criminal justice: 'the corrections which take place within the Hôpital', it was noted at Rennes, 'are regarded as penitences rather than punishments'.[41] The institutions came to serve for mopping-up categories of local pauper who proved a problem for local élites. When non-local vagrants became a menace, they were simply rounded up and exiled from the city—making them someone else's problem. The main charge on the municipalities were local groupings of the very young and the very old, whose common trait was their inability to achieve economic independence, and who could not depend on family, kin, or neighbours to support them. The *hôpitaux* thus came to deal essentially in the reception and early care of foundlings, orphans, and children of impoverished parents, and the warehousing of the aged and chronically infirm or disabled. The fact that local paupers did not shrink from entering of their own volition, often utilizing the institutions to cope with the exigencies of biological and family life cycles, showed that many regarded them as refuges rather than prisons.[42] Overall, a hole lay at the heart of the *hôpital général*: able-bodied beggars and vagrants against whom the central government had constructed its social policy of confinement were present only very exceptionally. Nor was the population of *hôpitaux généraux* distinguished by sickness or disease. If medical staff were attached to them, it was not because the hospital was for the sick but because such a motley collection of paupers and deviants was thought necessarily to be a spawning ground for disease.[43]

If their disciplinary impact and their medical status were far less marked than is often held, the creation of the *hôpitaux généraux* did, however, have a major if sometimes oblique impact on hospitals and medical provision. France's hospital geography was, first, rationalized and urbanized by the process. Earlier efforts by the central government to support municipal efforts to concentrate charitable resources in such a way as to ensure that they served some social purpose had culminated in the royal creation in 1672 of the Order of Saint-Lazare

[41] AD Ille-et-Vilaine C1266.

[42] Arguments about the actual utility of hospitals draw on the fine discussion of the point in S. J. Woolf, *The Poor in Western Europe in the Eighteenth and Nineteenth Centuries* (London, 1986); and S. Cavallo, *Charity and Power in Early Modern Italy: Benefactors and their Motives in Turin 1541–1789* (Cambridge, 1995). Cf. M. Dinet-Lecomte, 'Recherches sur la clientèle hospitalière aux XVIIe et XVIIIe siècles', *Revue d'histoire moderne et contemporaine*, 33 (1986), esp. 366 f.; and Jones, *Charitable Imperative*, esp. 9 f.

[43] On the latter point, we are in agreement with Foucault, *Folie*, 140.

and Mont-Carmel, the brainchild of war minister Louvois.[44] It was envisaged that commanders of the Order, scattered throughout the kingdom, would make their fortunes by seeking out and incorporating all disused charitable resources (leper houses not least). The beauty of the scheme for Louvois was that by awarding the commanderships to deserving military veterans, he killed two charitable birds with one stone. A good deal of concentration of charitable resources was certainly achieved by the scheme, but it was fraught with legal problems, proved unpopular with local authorities, and was too closely identified with Louvois to survive his death in 1691. A royal decree in 1693 abolished the Order of Saint-Lazare and Mont-Carmel and ordered the transfer of the charitable property it had amassed to major urban *hôpitaux généraux* and *hôtels-dieu*. The reallocations which took place over the next decade or so were, moreover, supplemented by the charitable resources expropriated from the persecuted Protestant community—a procedure endorsed by the Assembly of the Clergy ten years prior to the Revocation of the Edict of Nantes in 1685. The upshot of these measures was one of the most thorough reworkings of the geography of hospital provision in French history.[45] The diocese of Montpellier, for example—which had a Protestant presence—was effectively denuded of hospitals by the creation of an *hôpital général* in the diocesan capital in 1693 and much the same occurred in the Boulonnais.[46]

Hospital reorganization accompanying the creation of the *hôpitaux généraux* was important, second, in allowing a greater, more truly medical, definition to develop for a minority of hospitals, namely the urban *hôtels-dieu*, which survived the institutional mergers more or less intact. As we saw in Chapter 4, most medieval and Renaissance hospitals had been multi-purpose institutions which opened their doors to all categories of the poor and the needy: the sick were encompassed within wide-ranging groups including the aged, the infirm,

[44] This was in fact a re-creation, since it was based on the largely defunct medieval nursing order of Saint-Lazare. For this entire episode see M. C. Guérin, 'Une tentative de réforme militaire et hospitalière, 1672–1693: Son application en Normandie', diss., École Nationale des Chartes, Paris, 1968; F. Dissard, *La Réforme des hôpitaux et maladreries au XVIIe siècle* (Paris, 1938); Imbert, *Droit hospitalier*, 144 ff.; and D. Hickey, 'Closing Down Local Hospitals in Seventeenth-Century France: The Mount-Carmel and Saint-Lazare Reform Movement', *Histoire sociale/ Social History*, 25 (1992), 9–34.

[45] On the anti-Protestant measures, see E. Le Roy Ladurie, *Les Paysans de Languedoc* (2 vols.; Paris, 1966), ii. 612; and Imbert, *Droit hospitalier*, 101 ff. For the extent of reorganization see the *État général des unions faits des biens et revenus des maladreries, leproseries, aumôneries et autres lieux pieux aux Hôpitaux des pauvres malades* (Paris, 1705). For local exx. see AD Hérault C2957–8; AD Isère, Archives hospitalières de Grenoble E6–8; and W. J. Pugh, 'Social Welfare and the Edict of Nantes: Lyons and Nîmes', *French Historical Studies*, 8 (1974), 349–76.

[46] For Montpellier, AD Hérault, Archives de l'Hôpital Général de Montpellier A1; for the Boulonnais, A. Playoust-Chaussis, *La Vie religieuse dans le diocèse de Boulogne au XVIIIe siècle (1725–1790)* (Arras, 1976), 217.

pregnant women, the disabled, and the defenceless child, and extending even to itinerant workers and pilgrims.[47] In the late fifteenth and sixteenth century, a degree of medicalization was apparent: most hospitals, for example, came to exclude contagious diseases (including plague and syphilis) as well as pregnant women. The rationalization of hospital care from the second half of the seventeenth century accelerated the tendency to exclude certain diseases (especially contagious ones) and pregnant women. The administrators of *hôtels-dieu* could now refuse entry to incurable cases who risked clogging up hospital capacity, and redirect them to the local *hôpital général*. Furthermore, royal legislation with populationist intent which from 1686 restricted the right to go on pilgrimages outside France also had the effect of reducing the potential size of another species of the traditional clientele of *hôtels-dieu*.[48] Many *hôtels-dieu* continued to show a time-honoured willingness to admit travellers more in need of a bed for the night and a square meal than advanced medication: 'it is a general rule', noted the regulations of the hospital sisters of Saint-Joseph, 'that all the sick poor who are admitted to hospitals are presumed to need meat or bouillons.'[49] None the less, institutional rationalization in the late seventeenth century helped medicalize the clientele of the urban *hôtels-dieu*, which numbered nearly 400 on the eve of the Revolution (and contained perhaps around 20,000 beds).

The third way in which hospital reorganization in the late seventeenth century affected the relationship between medicine and the hospital was in regard to staffing. The creation of massive new hospital institutions created a demand for middle-management personnel which was filled by religious communities of nursing sisters.[50] These sisters—along with the sole male nursing order, the Brothers of Charity (for Voltaire, 'the only useful monks')[51]—were honoured members of the medical penumbra which surrounded the corporative medical community. Trained by apprenticeship, they performed minor surgical tasks such as blood-letting and dressing wounds and also acted as apothecaries in most institutions in which they served, referring only complex medicines to town practitioners. As we have seen, the Daughters of Charity, for example, took with them to a new establishment the tools of minor surgery and volumes of medical vulgarization, most notably Madame Fouquet's famous *Recueil de receptes* (though such volumes were usually outnumbered by religious tomes). At Commercy in the diocese of Verdun in 1678, the sisters' library included

[47] See above, Ch. 4, Sect. C. [48] Cf. Imbert, *Droit hospitalier*, 119.

[49] *Règles et constitutions pour les Religieuses hospitalières de Saint-Joseph* (Autun, 1686), 150.

[50] See above, Ch. 4, Sects. D and E. See too Imbert, *Droit hospitalier*, 227 ff.; and J. P. Gutton, 'La Mise en place du personnel soignant dans les hôpitaux français (XVIe–XVIIIe siècles)', *Bulletin de la Société française d'histoire des hôpitaux* (1987), 11–19; and Jones, *Charitable Imperative*, esp. chs. 3–5.

[51] Cited in Imbert, *Droit hospitalier*, 156.

eleven religious books, plus the *Médecin charitable* and the *Médecin des pauvres*; while at Sartrouville in the Paris diocese in 1734 the sisters possessed Madame Fouquet's *Receuil*, the *Médecin des pauvres*, and Charas's *Pharmacie royale*, plus a dozen works of piety.[52] Moreover, it seems often to have been the case that the arrival of Daughters of Charity led to hospital administrators building a small apothecary shop for them within hospital space, and equipping it with the drug vases and pots which number among the proudest antiques of a number of present-day institutions.[53]

Nursing sisters also embodied that strand of thinking about the problems of poverty which equated contagious disease with moral contamination. Their contracts of service stipulated that they were barred from treating contagious and shameful cases, and pregnant women.[54] Cleanliness, similarly, was seen as the obverse of godliness. Louise de Marillac had urged the early Daughters of Charity frequently to wash their hands and those of the poor. The regulations of the sisters at the hospital at Luzignan enjoined them to uphold 'cleanliness and neatness in their persons in all things, as serving much towards edification'. The constitutions of the Augustine sisters of the Miséricorde de Jésus, who served in a number of Breton localities, declared open war on stench: sisters were 'to keep the hospital very clean, to burn perfumes, to have filth emptied as swiftly as possible, to open windows to take in the air, and never to leave any linen or indecent thing lying about'.[55] Sometimes the emphasis on hygiene was seen as part of a charitable strategy: at the hospital at Laon in 1686 it was stated that 'cleanliness was absolutely necessary and required in hospitals both for the health of the poor and to attract visits and consolation from well-off persons'. It was important not to deter the charitably minded from generous giving.[56]

The silent take-over of the internal affairs of hospitals by nursing communities thus improved not only the spiritual tone of many institutions but also, as

[52] See above, Ch. 4, Sect. E; AN S6165 (Commercy), S6175 (Sartrouville). The Brothers of Charity had rather wider medical—and esp. surgical—ambitions; see *Observations sur l'Ordre hospitalier de Saint-Jean-de-Dieu, dit en France de la Charité* (n.p., n.d. [?1790]).

[53] Exx., drawn from the service contracts of the Daughters of Charity (AN 6160–80) include the hospitals at Buzançois in the diocese of Bourges (1723: S6162); Coulommiers in the diocese of Meaux (1712: S6165); Langres (1720: S6169); Libourne (1725: S6169); Marly (1747: S6170); Melun (1711: S6170); Orange (1753: S6172); and so on.

[54] The contracts of the Daughters of Charity (AN S6160–80) are systematically analysed in C. Jones, *Charitable Imperative*, ch. 5.

[55] M. Flinton, *Sainte Louise de Marillac: L'Aspect social de son œuvre* (n.p., n.d. [?1957]); AD Haute-Vienne, Series H Sup (Limoges) H21 (for Luzignan); *Constitution et règles des Sœurs Augustines de la Miséricorde* (1666), 169; and R. Piacentini, *Origines et évolution de l'hospitalisation: Les Chanoînesses Augustines de la Miséricorde* (Paris, 1957).

[56] Leclerc, 'Histoire de l'établissement de l'Hôpital Général de Laon', MS at AD Aisne 12A200. Cf. for similar cases of cleanliness perceived as an attraction for charitable donors, AD Côte-d'Or C375; and AD Isère, Archives hospitalières de Grenoble IV E2.

an incidental afterthought, their state of hygiene. The Daughters of Charity, the most prominent and most archetypal of such communities, were to be found in 175 hospitals at the end of the Ancien Régime, the Sisters of Saint-Thomas of Villeneuve in some forty-seven, the Brothers of Charity in roughly thirty.[57] Other communities had different geographical implantations: the Filles de Sagesse were a strong presence in the west, while the Sisters of Saint-Charles of Nancy had dozens of outposts in Lorraine.[58] In many locations, institutions were under communities unaffiliated to any national or regional organization but supervised by the bishop or parish clergy, who often devised their rules and regulations in accordance with one of the major national bodies, particularly the Daughters of Charity.

The reforms and rationalization of the late seventeenth century also increased the level of the medical as well as nursing encadrement of hospitals. This was not inevitable or universal. Though many of the smaller hospitals (*hôpitaux*) which studded the French countryside and which encompassed both medical care and long-term residence did feel the impact of these developments, many merely carried on regardless of formally qualified medical personnel.[59] Elsewhere, as at Pau in 1686, the appearance of nursing sisters led to stipendiary medical staff being dismissed on the grounds that the sisters were better attuned to the requirements of hospital inmates.[60] The orientation of the *hôpitaux généraux* around incurable conditions rather than disease made their medical staff requirements seem paltry, and indeed there was no physician at all attached to the *hôpitaux généraux* at Issoire and Nevers before 1749 and 1761 respectively.[61] Nevertheless, as the eighteenth century wore on there was clear evidence, as we shall see below, of larger numbers of physicians and surgeons attached to the institutions being paid better salaries, and being obliged to assume a wider range of medical and paramedical tasks. This process was increasingly driven by developments taking place in military and naval hospitals.

[57] BN MS FR Nouvelles Acquisitions 22742 (note by the surgeon Jacques Tenon); and, for the Brothers of Charity, *Observations sur l'Ordre*, 4.

[58] The best guide to these institutions and their histories is C. Molette, *Guide des sources de l'histoire des congrégations féminines françaises de vie active* (Paris, 1974). Though based on the situation following heavy losses in the Revolution, the maps in J. P. Goubert and R. Rey (eds.), *Atlas de la Révolution française*, vii. *Médecine et santé* (Paris, 1993), 36–7, are very suggestive.

[59] Cf. Table 11*a*; Jeorger, 'Structure hospitalière', 1031 ff.; Gutton, 'Mise en place du personnel soignant'.

[60] AD Pyrénées-Atlantiques, Archives hospitalières de Pau E52. For similar cases, also involving the Daughters of Charity, see AN S6161A (Bazas), S6174 (La Réolle), S 6160 (Alençon); and for a case involving the Brothers of Charity, A. Prudhomme, *Inventaire sommaire des archives historiques de l'hôpital de Grenoble* (Grenoble, 1892) p. xxii.

[61] B. Bellande, *L'Ancien Hôpital Général d'Issoire: Histoire institutionnelle et sociale de 1684 à la Révolution* (Montpellier, 1966); abbé Boutillier, *Inventaire sommaire des archives hospitalières de Nevers* (Nevers, 1877), 23.

C. Military and Naval Medicine

As we saw in Chapter 4, the growth of a standing army, especially in the second quarter of the seventeenth century, obliged the absolute monarchy to confront new problems of control and discipline. One area of the state's concern was to protect the civilian population from the depredations caused by the huge, ill-disciplined, and predatory numbers of military men, deserters, and demobilized veterans. With traditional welfare arrangements for deserving veterans (such as royal pensions) unable to cope with the scale of the problem, the state resorted to the practices of confinement it was developing in social policy more generally.[62]

The royal edict establishing the Paris Hôpital Général in 1656 had been flanked by an edict ordering disabled soldiers to be despatched to garrisons and stopped from begging in towns. The Hôtel des Invalides established in 1670 was in effect a kind of *hôpital général* for army veterans. Despite its rhetoric of dyn-astic benevolence, moreover, the establishment was saturated in the mercantilist and populationist concerns of the monarchy. It aimed to confine a potentially dangerous group, keeping them out of harm's way, insulating them from the rest of society, habituating them to productive labour, and maybe even training them in spiritual perfection: as one, perhaps overly enthusiastic, pamphleteer put it, 'the same men who seemed completely useless become new athletes able to conquer the heavens, and form a sacred militia which continues to fight for His Majesty, now with blessings and prayers'.[63]

The medical service of the Invalides, which was under the supervision of the war ministry, was noticeably more intense than that of civilian hospitals. Rooms were built deliberately large, airy, well lit, and hygienic, with careful consideration given to water-supply and waste-disposal. There was a separate infirmary for veterans who fell sick and a block for lunatics. The principal physician enjoyed extensive privileges, and the surgical services were strengthened from 1707 by the appointment of a surgeon-major, one of whose tasks was the care of syphilitics, who were kept apart from other inmates. Teaching in surgery was provided from 1718 for apprentice surgeons: the courses became famous throughout Paris in the 1720s when they were taken over by the brilliant surgeon Morand, one of the founders of the Academy of Surgery. The status of the establishment as a medical teaching institution, grounded in the especially profuse supply of cadavers the institution's medical staff were able to secure, was underlined in further legislation in 1728 and 1747.[64]

[62] See above, Ch. 10, Sect. B.

[63] Le Jeune de Boulencourt (1683), cited in *Les Invalides: Trois siècles d'histoire* (Paris, 1974), 205. The early chs. of I. Woloch, *The French Veteran from the Revolution to the Restoration* (Chapel Hill, NC, 1979) and A. Corvisier, *L'Armée française de la fin du XVIIIe siècle au ministère de Choiseul: Le Soldat* (2 vols.; Paris, 1964), 901 ff. are also useful for the history of the institution.

[64] *Invalides*, 181 f.

The Invalides was a pioneer of the medicalized hospital which over the eighteenth century came to be characteristic of health provision within the armed forces.[65] Louis XIV's wars saw the state taking increasing responsibility for the health of troops, particularly with Louvois at the helm in the war ministry. Provisional field hospitals were established on campaign; major civilian hospitals were called on to take up any overflow, especially away from the front; and regiments were accorded a standard medical encadrement. The king's great military engineer Vauban routinely designed military hospitals in all the hundred or more localities he constructed or fortified. In 1708 a network of military hospitals was established, and fixed ratios of medical staffing set.

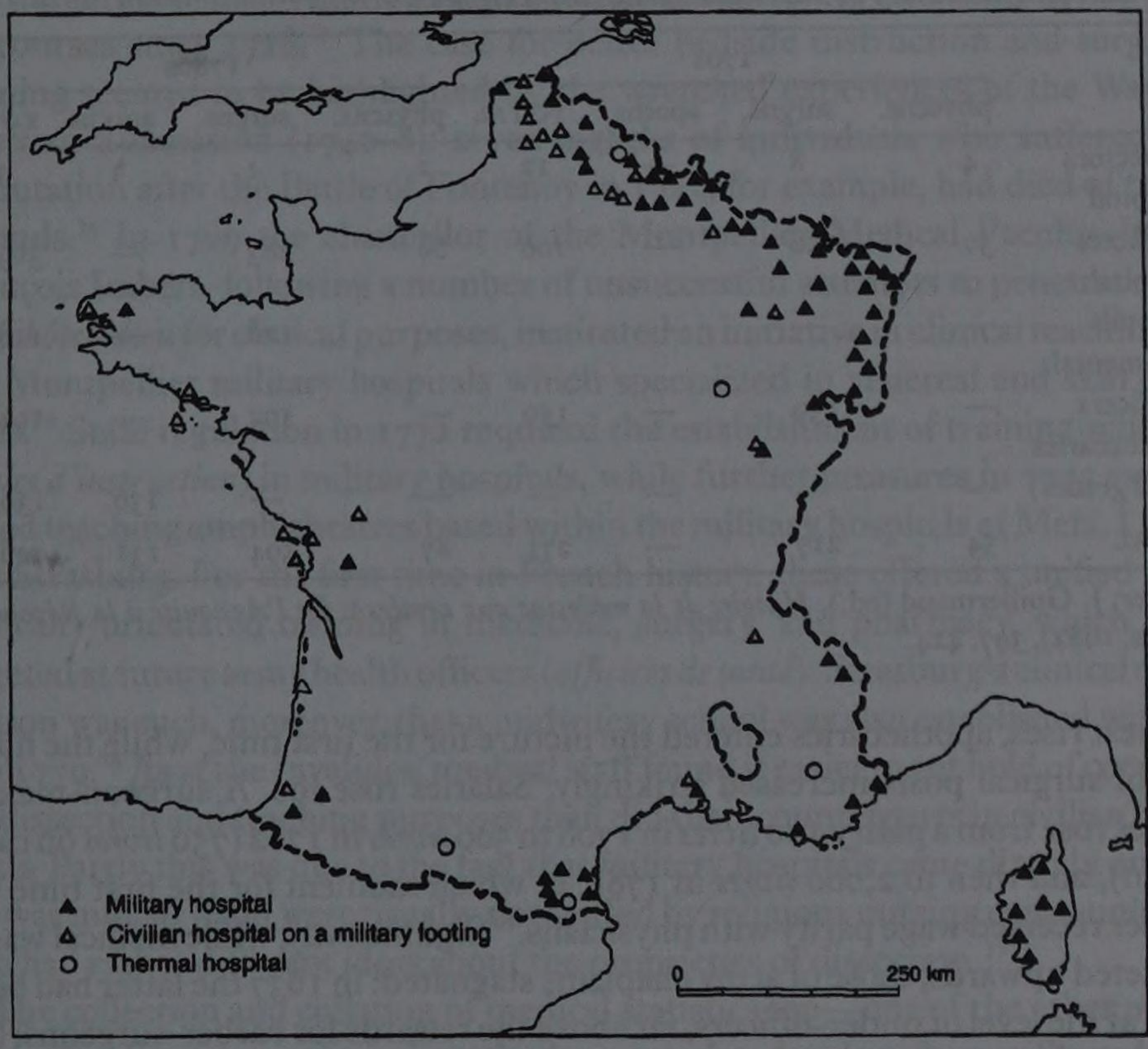
The hospital network thickened over the course of the century, and it developed in sophistication too (see Map 11*a*). Specialized syphilis institutions operated in Montpellier and Besançon—for serving soldiers sacrificed more freely to Venus than to Mars[66]—and a number of mineral spas were incorporated. The spas at Barèges, Bourbonne-les-Bains, Digne, and Saint-Amand were very specifically aimed at ailing soldiers—notably those with nervous ailments, paralysis, and skin disease. Barèges developed particularly strongly from the 1730s when the road there became practicable by carriage—Louvois had reached it on horseback—and in 1736 principal minister Cardinal Fleury built a military hospital on the site with thirty-six beds. The popularity of spas did not stop growing, though military bureaucrats endlessly railed about the unseemly ease with which military medical staff gave soldiers passes to them. By the 1780s there were 250 military beds at Barèges, for example, but the spa had become so popular with civilians that it was said that the soldiers had to do their bathing by night.[67]

A particularly striking feature of the military medical establishment was the very high proportion of surgeons within it. Although commanders and aristocratic officers liked the attentions of physicians on their staff for their own health, they viewed the cheap and cheerful services of surgeons and apothecaries as appropriate for the rank and file, especially in times of battle. As the celebrated

[65] J. Guillermaud (ed.), *Histoire de la médecine aux armées*, i. *De l'Antiquité à la Révolution* (Paris, 1982); J. des Cilleuls *et al.*, *Le Service de santé militaire de ses origines à nos jours* (Paris, 1961); D. Voldman, *Les Hôpitaux militaires dans l'espace sanitaire français, 1708–1789* (Paris, 1980); Imbert, *Droit hospitalier*, 46 ff., 85 ff., 164 ff.; Corvisier, *Armée française*, 655 ff.; and Jones, 'The Welfare of the French Footsoldier from Richelieu to Napoleon', in id., *Charitable Imperative*.

[66] For the Montpellier institution, see L. Dulieu, 'L'Hôpital royal et militaire de Montpellier', *Monspeliensis Hippocrates*, 9 (1966), 3–16. For Mars and Venus, from a physician's report, see AD Moselle H4677.

[67] J. C. Devos, 'L'Hôpital militaire de Barèges (Hautes-Pyrénées) du début du XVIIIe siècle à la fin du Premier Empire', *Actes du 97e Congrès National de Sociétés Savantes (Nantes 1972): Section d'histoire moderne et contemporaine* (Paris, 1977), 111. For abuses of the system, cf. AD Côte-d'Or C366.



MAP 11*a*. The military hospitals network in 1781

Source: J. Guillermaud (ed.), *Histoire de la médecine aux armées*, i. *De l'Antiquité à la Révolution* (Paris, 1982), 432.

Parisian surgeon Pierre Dionis stated, 'it is in the armies and sieges that surgery triumphs, it is there that everyone recognizes its empire and its necessity, it is there that its actions rather than its words make their own eulogy'.[68] Army posts for physicians, the court physician Eustache Marcot gloomily wrote to a supplicant in 1734, were 'rare and not very remunerative', and usually reserved for individuals who had already served in the army. Thus while in that year forty-three surgeons left Lyons for the army of Italy, and another dozen were sought in Montpellier, premier physician Chicoyneau needed to find only six physicians for the force.[69] Total numbers rose sharply over the century, nearly trebling in size (see Table 11*b*). Though the number of physicians registered only very

[68] Cited in Guillermaud (ed.), *Histoire de la médecine aux armées*, 372.

[69] AD Hérault C 565, and Archives de l'Hôpital Général de Montpellier (antérieures à 1790) E88.

TABLE 11*b*. *The military medical establishment in the eighteenth century*

	1708				1780s			
	physcns.	surgns.	apoths.	TOTAL	physcns.	surgns.	apoths.	TOTAL
Inspectors	4	8	—	12	1	1	1	3
Hospital officers	50	50	—	100	86	283	—	369
Hospital pupils	—	—	—	—	—	118	—	118
Regimental officers	—	159	—	159	—	192	—	192
Apothecaries (all grades)	—	—	—	—	—	—	130	130
TOTAL	54	217	—	271	87	594	131	726

Source: J. Guillermaud (ed.), *Histoire de la médecine aux armées* i. *De l'Antiquité à la Révolution* (Paris, 1982), 397, 424.

modest rises, apothecaries entered the picture for the first time, while the number of surgical posts increased strikingly. Salaries rose too. A surgeon-major's wages rose from a paltry 180 *livres* in 1708 to 500 *livres* in 1762 (750 *livres* on campaign), and then to 2,000 *livres* in 1788, at which moment for the first time the officer received wage parity with physicians.[70] Significantly, while medical wages rocketed upwards, those of army chaplains stagnated: in 1637 the latter had been paid at the level of under-officers, far above the rewards for barber-surgeons; but by the end of the Ancien Régime, they stood at only between 500 and 1,200 *livres*.[71] A sign of growing solidarity and self-esteem in the army medical corps was the adoption of a distinctive uniform for military medical staff: surgeons in 1757, physicians in 1775, and apothecaries in 1786. Significantly, the uniforms encompassed the wearing of a sword, the quintessential emblem of gentility and social acceptance.

The armed forces proved a testing ground for the content of medical and surgical training. Thus although historians conventionally date the 'birth of the clinic' from the 1790s, many of the elements of the approaches associated with that development—teaching practice, an emphasis on bedside medicine, the routine practice of autopsies, and a concern with medical statistics—had all been found in Ancien Régime military hospitals.[72] State regulations in 1747 were the first to mention the need for military hospitals to provide teaching in anatomy (incorporating dissections) by both physicians and surgeons but in fact a number of institutions were already practising this precept. The physician-major

[70] Cilleuls *et al.*, *Service de santé*, 56. [71] Ibid. 110.

[72] Cf. Jones, 'Construction of the Hospital Patient', commenting on the accounts of both Ackerknecht and Foucault.

and the surgeon-major of the Hôpital Gaujot at Strasburg, for example, had put on courses since 1718.[73] The case for better bedside instruction and surgical training seemed to be highlighted by the wretched experiences of the War of Austrian Succession (1740–8): seven-eighths of individuals who suffered an amputation after the Battle of Fontenoy in 1745, for example, had died of their wounds.[74] In 1769 the chancellor of the Montpellier Medical Faculty, Jean-François Imbert, following a number of unsuccessful attempts to penetrate the local *hôtel-dieu* for clinical purposes, instituted an initiative in clinical teaching at the Montpellier military hospitals which specialized in venereal and skin diseases.[75] State regulation in 1772 required the establishment of training schools (*écoles d'instruction*) in military hospitals, while further measures in 1775 established teaching amphitheatres based within the military hospitals at Metz, Lille, and Strasburg. For the first time in French history, these offered a unified and clinically orientated training in medicine, surgery, and pharmacy, which was targeted at future army health officers (*officiers de santé*). Strasburg's clinical reputation was such, moreover, that a midwifery school was also established within it in 1779.[76] As at the Invalides, medical staff found it easier to get hold of corpses for dissection and teaching purposes than did their counterparts in civilian hospitals. Partly this was due to the fact that military hospitals came directly under the war ministry and were usually not staffed by religious nursing communities, who had rather different ideas about the proprieties of dissection.[77]

The collection and collation of medical statistics too—one of the other main elements of anatomo-clinical method—were also developed in military hospitals under the Ancien Régime.[78] The French army was famous for the volume and variety of its paperwork. Indeed, the new attention to record-keeping within military medicine helped develop the notion of the hospital as a research centre. Significant in this respect were the innovatory practices of Joseph-Michel Dulaurens, who was appointed to the naval hospital at Rochefort in 1758. Two *cahiers de visite*, in the form of a single sheet per ward, were kept at Rochefort for the benefit of the nursing staff, but Dulaurens found them uninformative and unsafe: they gave no indication of the patient's name, merely the treatment ordered and the diet to be followed per bed. They were useless as a

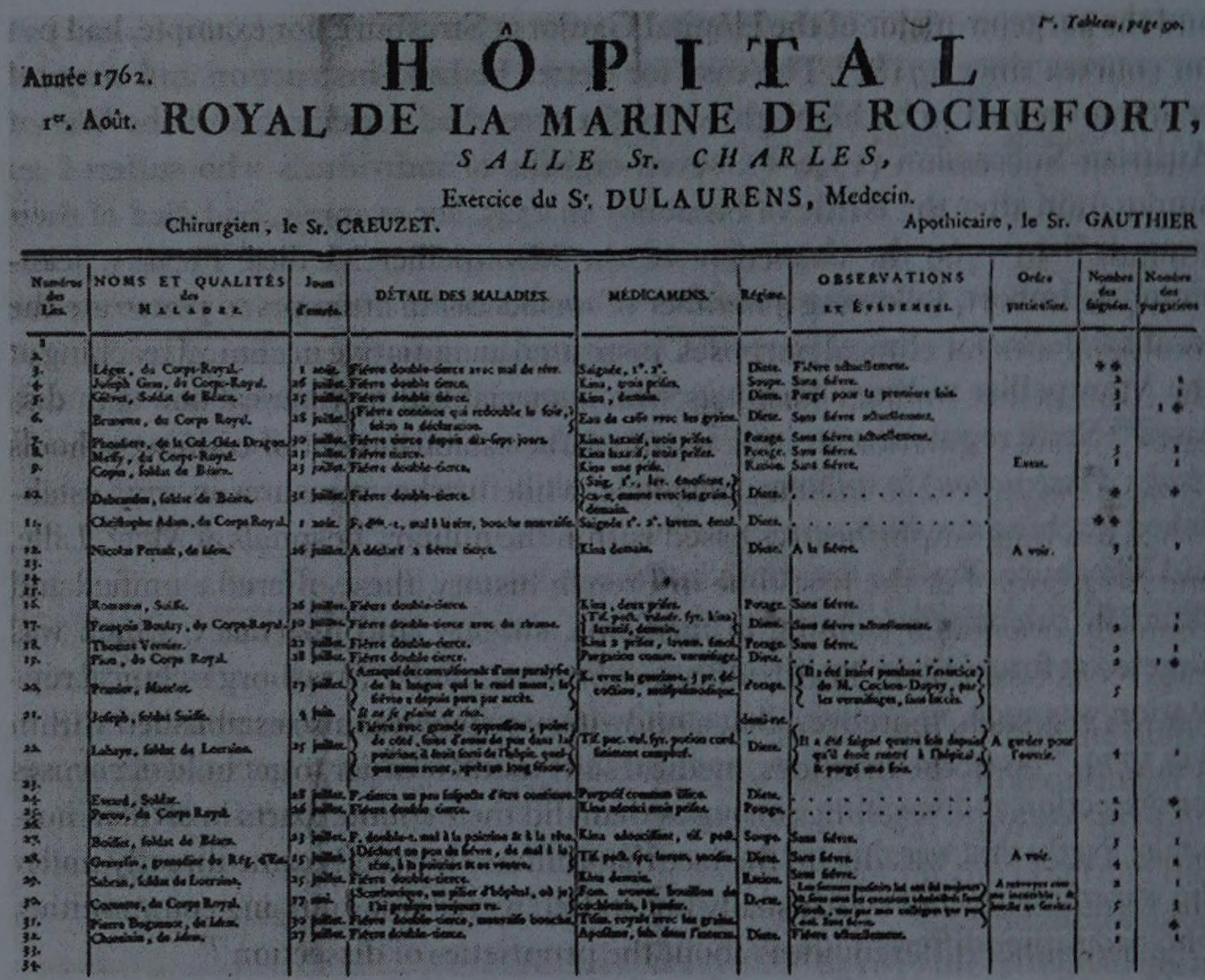
[73] F. Schierer, 'L'Hôpital militaire Gaujot de Strasbourg, 1691–1939', thesis, Strasburg Univ., 1955, pp. 17 ff.; and for the Paris Invalides, see above, Ch. 4, Sect. C.

[74] A. Cabanès, *Chirurgiens et blessés à travers l'histoire: Des origines à la Croix-Rouge* (Paris, 1912), 250.

[75] AD Hérault C525, C555, C559, and Archives hospitalières de l'Hôtel-Dieu Saint-Eloi de Montpellier (antérieures à 1790) E11. Cf. Dulieu, 'Hôpital royal et militaire'.

[76] Schierer, 'Hôpital militaire Gaujot', 20. [77] See below, Sect. D.

[78] For the background to this development, see J. C. Perrot, 'Les Économistes, les philosophes et la population', in J. Dupâquier (ed.), *Histoire de la population française*, ii. *De la Renaissance à 1789* (Paris, 1988), 499 ff.



1er. Tableau, page 90.

Année 1762.
1er. Août.

HÔPITAL ROYAL DE LA MARINE DE ROCHEFORT,
SALLE St. CHARLES,
Exercice du St. DULAURENS, Medecin.
Chirurgien, le St. CREUZET. Apothicaire, le St. GAUTHIER

Numéros des Lits.	NOMS ET QUALITÉS des MALADES.	Jour d'entrée.	DÉTAIL DES MALADIES.	MÉDICAMENS.	Régime.	OBSERVATIONS ET ÉVÉNEMENS.	Ordre particulier.	Nombre des saignées.	Nombre des purgations
1									
2									
3.	Légat, du Corps-Royal.	1 août.	Fièvre double-tierce avec mal de tête.	Saignée, 1°. 2°.	Diete.	Fièvre ultieurement.		* *	
4	Joseph Gros, du Corps-Royal.	26 juillet.	Fièvre double tierce.	Kina, trois pilles.	Soupe.	Sans fièvre.		2	1
5.	Gilles, Soldat de Béarn.	25 juillet.	Fièvre double tierce.	Kina, demain.	Diete.	Purgé pour la première fois.		3	1
6.	Beaurme, du Corps Royal.	28 juillet.	Fièvre continue qui redouble le soir, selon sa déclaration.	Eau de caffé avec les grains.	Diete.	Sans fièvre ultieurement.		1	1 *
7.	Phouhers, de la Col. Gén. Dragon.	30 juillet.	Fièvre tierce depuis dix-sept jours.	Kina laxatif, trois pilles.	Potage.	Sans fièvre ultieurement.			
8.	Melly, du Corps-Royal.	31 juillet.	Fièvre tierce.	Kina laxatif, trois pilles.	Potage.	Sans fièvre.		3	1
9.	Copin, Soldat de Béarn.	23 juillet.	Fièvre double-tierce.	Kina une pille.	Ration.	Sans fièvre.	Exeat.	1	1
10.	Dubocandon, Soldat de Béarn.	31 juillet.	Fièvre double-tierce.	Saig. 1°., lav. émoliens, ca-t, manne avec les grains demain.	Diete.	. . . . .		*	*
11.	Christophe Adam, du Corps Royal.	1 août.	F. dble.-t., mal à la tête, bouche mauvaise.	Saignée 1°. 2°. lavem. émol.	Diete.	. . . . .		* *	
12.	Nicolas Perault, de idem.	26 juillet.	A déclaré 2 fièvre tierce.	Kina demain.	Diete.	A la fièvre.	A voir.	3	1
13.									
14.									
15.									
16.	Romanon, Suisse.	26 juillet.	Fièvre double-tierce.	Kina, deux pilles.	Potage.	Sans fièvre.			
17.	François Boutry, du Corps-Royal.	30 juillet.	Fièvre double-tierce avec du rhume.	Tél. purg. vulnér. syr. kina laxatif, demain.	Diete.	Sans fièvre ultieurement.		2	1
18.	Thomas Vernier.	22 juillet.	Fièvre double-tierce.	Kina 2 pilles, lavem. émol.	Potage.	Sans fièvre.		2	1
19.	Faon, du Corps Royal.	28 juillet.	Fièvre double-tierce.	Purgation commun. vermifuge.	Diete.	. . . . .		2	1 *
20.	Poussier, Maître.	27 juillet.	Attaqué de convulsions d'une paralysie de la langue qui le rend muet, la fièvre a depuis pris par accès.	K. avec la gentiane. 3 pr. décoctions, antiphlogistique.	Potage.	Il a été traité pendant l'exercice de M. Cochon-Duprey, par les vermifuges, sans succès.		5	
21.	Joseph, Soldat Suisse.	4 juin.	Il ne se plaint de rien.		demi-ration.				
22.	Labaye, Soldat du Lorrain.	25 juillet.	Fièvre avec grande oppression, point de côté, toux d'avant de pus dans la poitrine, à droit tiré de l'hôpital, quelque temps avant, après un long séjour.	Tél. purg. vul. syr. potion cordialement composé.	Diete.	Il a été saigné quatre fois depuis qu'il étoit entré à l'hôpital, & purgé une fois.	A garder pour l'ouvrir.	4	1
23.									
24.	Eward, Soldat.	28 juillet.	F.-tierce un peu soupçonné d'être continue.	Purgatif commun tiéde.	Diete.	. . . . .		2	*
25.	Perrot, du Corps Royal.	26 juillet.	Fièvre double tierce.	Kina adonci trois pilles.	Potage.	. . . . .		3	1
26.									
27.	Boillot, Soldat de Béarn.	23 juillet.	F. double-t. mal à la poitrine & à la tête.	Kina adoucissant, tél. purg.	Soupe.	Sans fièvre.		3	1
28.	Grosselin, grenadier du Rég. d'Au.	15 juillet.	Déclaré un peu de fièvre, de mal à la tête, à la poitrine & au ventre.	Tél. purg. syr. lavem. émolien.	Diete.	Sans fièvre.	A voir.	4	1
29.	Sabrin, Soldat de Lorraine.	25 juillet.	Fièvre double-tierce.	Kina demain.	Ration.	Sans fièvre.		2	1
30.	Coumette, du Corps Royal.	27 mai.	Scorbutique, un pilier d'hôpital, où je l'ai pratiqué toujours vu.	Fom. aromat. bouillon de cochlearia, à prendre.	Diete.	Les fomentations paroissoient lui avoir été toujours très sensibles, & les vomissemens absolument funestes, tant par mes collègues que par moi. Sans fièvre.	A retourner avec une incurable, & inutile au service.	5	3
31.	Pierre Bogumon, de idem.	30 juillet.	Fièvre double-tierce, mauvaise bouche.	Tisan. royale avec les grains.				1	*
32.	Chaumin, de idem.	27 juillet.	Fièvre double-tierce.	Apoflume, lab. dans l'intervalle.	Diete.	Fièvre ultieurement.		1	1
33.									
34.									

ILLUSTRATION 21. Specimen *cahier de visite*, Rochefort Navy Hospital. From J.-M. Dulaurens, *Essai sur les établissemens nécessaires et les moins dispendieux pour rendre le service des malades dans les hôpitaux vraiment utile à l'humanité* (Paris, 1787), 90. Dulaurens's pioneering clinical record has columns for name and background, date of admission, sickness, treatment, regime followed, outcome, etc.

written record of the history of individual inmates under the care of the physician. For a trial period of two months in 1762–3, he therefore substituted the traditional *cahier* with one of his own devising. This still consisted of a single sheet for the whole ward but was divided into columns that gave the inmate's name as well as his malady, any attendant problems, and the treatment prescribed. One line, Dulaurens believed, was sufficient to record all the necessary information: the physician could thereby keep an accurate account of his patient's progress without undue strain on himself, and Dulaurens claimed he had 700 inmates under his care.[79]

There were, it was true, severe limitations on the role of the military hospital in providing a uniform or coherent set of research methodologies. Significantly, for example, there was as yet no attempt to place accounts of Dulaurens's

[79] *Essai sur les établissemens nécessaires*, 90 ff.

research in the public domain or to set up a scholarly dialogue about the way trials were conducted. Innovators often worked on their own with little support. Dulaurens, for example, abandoned his new form of record-keeping after two months because he had to fund the experiment out of his own pocket: 'the modesty of my fortune forbade this sacrifice to my zeal' was how he put it.[80] On several occasions he wrote to his superiors in Paris requesting that his note-taking methods be generalized within military and naval hospitals, but to no avail.

Our knowledge of how some of the trials were conducted within the military hospitals sector suggests that many military and naval physicians read their results according to their initial prejudices. We can see some of the problems in action in research conducted into the value of electrotherapy by Nicolas Chambon de Montaux at Bourbonne-les-Bains in 1782. Chambon showed a touching and continuing faith in his own procedures despite the catalogue of accidents with which his trials was marked. He failed to get support from local administrators; he had to pay out of his own pocket for nursing assistance for the paralytics and rheumatism cases he was working on; and conditions proved too damp to produce sufficient electricity to make an impact on the health of the several dozen soldiers who acted as his guinea-pigs. There were, moreover, grounds to doubt the validity of any successful conclusions, even had he achieved them. For Chambon painted a gruesome picture of the baths, with the Bourbonne springs being endlessly flooded by rainwater, with patients exposed to the elements, with the waters contaminated by urine and pus from wounds, and befouled by floating excrement and a noxious scum which caused nausea in some of the patients.[81]

Individuals like Chambon were groping towards experimental therapeutic trials for innovatory forms of treatment. But if his example is at all typical, there was more groping than achieving, and more than sufficient grounds for the scepticism many colleagues accorded such results. Even so, statistical analyses came to form part of trials performed on a number of other new forms of medication—notably those relating to venereal disease, one of the troops' most frequent ailments. The anti-venereal *dragées* of the Dutch entrepreneur Keyser were tried out in select military hospitals in the late 1750s and early 1760s before becoming, on the basis of their apparently high success-rate, the ministry of war's preferred treatment.[82] Other venereal treatments to be experimented on in military hospitals in the last decades of the Ancien Régime included Royer's

[80] Ibid. 92.

[81] Nicolas Chambon de Montaux, 'Observations sur les résultats heureux [*sic*] de l'électricité combinés avec l'usage des eaux thermales salines, d'après les expériences faites en 1782 à Bourbonne-les-Bains, par ordre du Roi à l'hôpital militaire de cette ville', BFMP MS 5143, *passim*.

[82] See above, Ch. 10, Sect. D. Cf. AD Hérault C554; J. Colombier, *Médecine militaire* (Paris, 1778), 299 ff.

mercurial enemas; Baumé's course of bathing; Lefebvre de Saint-Ildephont's 'aphrodisiac chocolates'; and Laffecteur's non-mercurial vegetal *rob*, or syrup. In the 1780s the anti-haemorrhagic powders of the English entrepreneur Faynard were also tested in military hospitals. Medical entrepreneurialism worked well when it was hand-in-glove with the state.[83]

A great many of these features of military medicine were replicated, even foreshadowed, in the navy.[84] The concern for social discipline was similar—and similarly mingled with charitable, mercantilist, and populationist motifs. Although there was no naval equivalent of the Invalides, veteran seamen (merchant as well as navy) were catered for by *hôpitaux généraux* in port cities. Thus the letters patent of the Hôpital at Saint-Malo in 1680 stated that its aim was

> to admit not only the poor of the city and its suburbs but also sailors from the area and abroad who have served on vessels and who by dint of their age or wounds are invalids [*invalides*], so that seeing themselves assured of home and subsistence the rest of their days, they conduct themselves courageously in actions perilous for the glory of the state and the conservation of the good of individuals.[85]

Hospital ships had first appeared under one of the artisans of the French navy (and one of the architects of monarchical absolutism), Cardinal Richelieu. Their number and dispositions were increasingly closely regulated. The Marseilles galleys developed hospital provision at about the same time.[86] In 1667 posts of first physician, first surgeon, and first apothecary were created in the three great naval bases at Toulon, Rochefort, and Brest. The rudiments of a naval health service, foreshadowing the 1708 regulations for the army, were laid down in 1689, fixing levels of medical encadrement, medical supplies for voyages, and hospital provision. Port physicians and surgeons were entrusted with conducting annual lecture courses for local ships' surgeons, though this only

[83] M. Bouvet, 'Les Essais des spécialités pharmaceutiques dans les hôpitaux au XVIIIe siècle', *Pharmacie française*, 28 (1924), 200–4; Thomas Royer, *Nouvelles observations faites dans les hôpitaux militaires et de la marine pour constater le sûreté et l'efficacité des lavements anti-vénériens* (London, 1771); M. A. J. B. M. Guénet, *Éloge historique de Michel Philippe Bouvart* (Paris, 1787); Mollée, *Méthode de traiter les maladies vénériennes, au moyen de la quintessence* (Paris, 1753); R.-G. Lefebvre de Saint-Ildephont, *Le Médecin de soi-même, ou Méthode simple et aisée pour guérir les malades vénériennes* (Paris, 1775); *Elixir d'or et elixir blanc du général de la Motte* (Paris, 1749), 6. For Faynard (whose successes seem to have been limited) see AD Hérault C525; and the untitled handbill at BN Te-151-1105. See also above, Ch. 4, Sect. A.

[84] Besides Guillermaud (ed.), *Histoire de la médecine aux armées*, see P. Pluchon, *Histoire des médecins et pharmaciens de marine et des colonies* (Toulouse, 1985); P. Huard and P. Niaussat, 'Les Hôpitaux de la marine française au XVIIIe siècle' in *La Médecine hospitalière française au XVIIIe siècle* (Strasburg, 1980); and *Le Médecin et la mer* (Entretiens de Bichat, Paris, 1961).

[85] AD Ille-et-Vilaine, Archives de l'Hôpital Général de Saint-Malo 2A1, 2A5.

[86] L. Mezzadri, *Saint Vincent de Paul (1581–1660)* (Paris, 1985), 122; and M. Forget, 'Saint Vincent de Paul et les galères', in *Saint Vincent de Paul: Actes du colloque international d'études vincentiennes* (Paris, 1986).

ratified what had already started to happen at a local level. In 1722 an official training school for surgeons had been created at Rochefort and similar courses were running in Toulon from 1725 and Brest from 1740. In 1782 naval training at Toulon and Brest was modelled on the military amphitheatres established in Metz, Lille, and Strasburg. The high number of corpses from the galleys—more than 100 dissections were carried out each year at Brest, for example—put the institutions in the forefront of the clinical approach.[87] Clinical trials for drugs were conducted within naval as well as military hospitals. Significantly too, the naval medical corps was allowed its own uniform in 1767.[88] The East Indies Company also established its own structures for medical instruction for its ships' surgeons over the eighteenth century.[89]

If the health services of the army and navy witnessed innovatory levels of clinical instruction and medical research, they also acted as a laboratory for experimenting with preventive medicine of all kinds. The neo-Hippocratic revival of interest in environmental medicine struck a resonant note in military health circles. Where nursing sisters had shown a commitment to cleanliness whose roots lay in a moral and religious world-view, in military and naval circles the interest in hygiene was more directly linked to the general medical and intellectual *Zeitgeist*, in particular the conviction that illness was not simply a question of sick individuals but that it was located in an environment subject to human intervention and improvement. The successful military action aimed at containing the Marseilles plague in 1720 gave added legitimacy to the environmentalist view that quarantine-like segregation could provide a means of preserving the healthy from the dangers of a pathogenic site. The influential writings of the Anglo-Scottish physician Arbuthnot from the 1730s and 1740s accredited the uses of ventilation, drainage, and improved water supply as the royal road towards achieving public health.[90]

The costs of war acted as a perennial stimulant to improvement in this area. High wound mortality, for example, was not just a condemnation of deficient surgical technique, it was an indictment of filthy hospitals and barracks where the sick and wounded died in droves from cross-infection. Military medical

[87] Pluchon, *Histoire des médecins*, 73 ff.; J. Meyer, 'L'Enquête de l'Académie de Médecine sur les épidémies, 1774–1794', in J. P. Desaive *et al.*, *Médecins, climat et épidémies à la fin du XVIIIe siècle* (Paris, 1972). On a related tack, cf. J. C. White, 'Un exemple des réformes humanitaires dans la marine française: L'Hôpital maritime de Toulon (1782–1787)', *Annales du Midi* (1971), 387–95. The galley crews on the Mediterranean were suppressed in 1748 and the *galériens* distributed around the naval bases whence no galley had ever sailed.

[88] *Médecin et la mer*, 50. For the developments in general, Guillermaud (ed.), *Histoire de la médecine aux armées*, esp. 383 ff.

[89] *Médecin et la mer*, 18.

[90] On this intellectual tradition, see esp. J. C. Riley, *The Eighteenth-Century Campaign to Avoid Disease* (London, 1987), and above, Sect. C.

regulations introduced towards the end of the War of Austrian Succession in 1747 stressed the role of a healthy environment in the welfare of troops. Triage of hospital inmates into fever-cases, the wounded, and convalescents was increasingly rigorously applied. It was the Seven Years War which really made improved health measures a major plank of state policy. A greater emphasis on troops' welfare, evident in a number of spheres,[91] gave the impetus to the wider diffusion of measures of environmental medicine.

Civilian war commissaries (*commissaires des guerres*), situated midway between medical staff and the war ministry, assumed increasingly prominent medical and hygienic responsibilities as the century wore on. Crucial too was the military hospitals' inspectorate introduced in 1718. Though its exact organization varied over time, and though it was never able completely to control the endemic problems of venality and inefficiency in army supply, inspectors, often of high intellectual calibre, acted as a consistent force for improvement in the health of the military environment. Jean-François Imbert, chancellor of the Montpellier Medical Faculty, for example, served as a military hospitals' inspector in the Midi. When he visited the military hospital in Montpellier in 1771, to take a single example, he subjected every aspect of its operation to a rigorous health audit. Staffing levels and competence at every level from physician-major and surgeon-major down to porters and orderlies were interrogated and their competence assessed; the medical staff was encouraged to continue its habit of frequent dissection; inmates were talked to, and entry and exit policy scrutinized; the statistical comparison of different medical techniques to combat venereal disease was noted; paperwork was checked; food was tested (the wine was good, but Imbert was unhappy about some rotten plums); the pharmacy was visited and its contents examined; and all aspects of hygiene ruthlessly criticized: chamberpots were to be less smelly, beds to be kept cleaner ('persuaded as I am', commented Imbert, 'that this contributes not only to the comfort of the sick but also to their cure'), mouseholes were to be blocked up, walls to be whitewashed ('for the sake of cleanliness and in order to destroy insects which are so common in these southern provinces'), better water-supply was to be laid on, rooms were to be perfumed during wound-dressing times, and a new septic tank was to be constructed to relieve pressure on the hospital's stinking latrines.[92]

The military hospitals' inspectorate proved a bastion of environmental medicine in the armed forces. The brilliant naval physician Pierre-Isaac Poissonnier (1720–98), appointed inspector of navy hospitals in 1769, was highly influential in this domain, and he was aided by his brother Antoine Poissonnier-

[91] E. G. Léonard, *L'Armée et ses problèmes au XVIIIe siècle* (Paris, 1958), 239 ff.
[92] AFMM C88. See too similar reports in AD Hérault C 559, C 560.

Desperrières (1723–?1792), an equally able administrator and from 1767 a firm believer in the importance of combating shipboard scurvy *à la Lind* through provision of fresh citrus fruit.[93] In the army, the Paris-trained physician and military bureaucrat Jean Colombier played a similarly pivotal role.[94] The son of a military surgeon from Toul, Colombier served in the army as a surgical apprentice himself before taking a medical training. In 1772 his *Code de médecine militaire* claimed to be the first work which dealt not only with sickness of the troops but also with the main principles of health and hygiene: 'the cure of most sick individuals', he contended, 'depends almost always as much on regimen as on remedies'. It therefore behoved the government to concern itself as much with the preservation of soldiers' health as the medication of their maladies. Author of a further volume, *Médecine militaire*, in 1778, Colombier became increasingly influential in the health bureaucracy of the war ministry, making major tours of inspection and setting new standards for care and hygiene. The ministry's decision in 1788 to close down many military hospitals and to replace them with regimental infirmaries which would provide a less infectious focus for health care, was largely based on his thinking on disease-prevention.

The medical corps attached to the armed forces was thus attracting individuals of growing stature and broadening intellectual interest. Many of the most brilliant surgical practitioners of the century had had military experience: premier surgeons La Peyronie and de La Martinière, for example, and many others besides.[95] As we have seen, changes in the educational regulations for surgeons in the course of the century made military service one of the preferred modes of training: from 1772, for example, surgeon trainees could qualify through three years of service in a frontier military hospital.[96] Many physicians had military experience too—Chirac, La Mettrie, Barthez, Imbert, Venel, etc.—in some cases as surgical staff. The construction of the military medical establishment over the eighteenth century allowed a career pattern for medical men to emerge, but equally important was the high number of established practitioners who had served a spell in the armed forces.

The emergence of a military medical press highlighted the broader intellectual impact of the military hospitals' sector and the rising status and self-confidence of the medical services of the armed forces. No fewer than seven newspapers targeted at military medical men were established over the last few

[93] P. Sue, *Éloge de Pierre-Isaac Poissonnier* (Paris, Year VII [= 1799]); AN O' 685 (relating to his pension).

[94] P. L. M. J. Gallot-Lavallée, *Un hygiéniste au XVIIIe siècle: Jean Colombier* (Paris, 1913).

[95] On this, and the military surgery background, see also T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980) 43–4, 142 f.

[96] See above, Ch. 6, Sect. B.

decades of the Ancien Régime. Though most were short-lived, they included much high-quality material. The two volumes (1766, 1772) of the *Recueil d'observations de médecine des hôpitaux militaires*, founded at the behest of war minister Choiseul by the experienced and influential physician François-Marie-Claude Richard de Hautesierck (d. 1789), contained innovative material and approaches to military hygiene and environmental health which in some respects prefigured the works of the Royal Society of Medicine we will discuss below.[97] The *Journal de médecine militaire*, which appeared with ministerial blessing under the editorship of Jacques de Horne between 1782 and 1789, was an attempt to resume this approach. Its contents, the work of no fewer than eighty-seven individuals holding military appointments, endeavoured to incorporate findings from surgery and pharmacy.[98]

The military imprint on the orthodox medical community was thus considerable and, as we shall see, it strongly influenced the civilian hospitals sector. Sick soldiers within military hospitals were the first group of hospital inmates to be utilized systematically as medical guinea-pigs: for scientific motives, but also for profit. This involved on one hand a bed-side observationalism and routine recourse to autopsy, but also a commitment to active testing of economical mass remedies on the collectivity in ways which the normal conventions of private practice ruled out of court. Therapeutic trials—written up and made available in published form for the wider medical community—were predicated, secondly, on a medicine of the site, which aimed at neutralizing hospital space and evacuating it of noxious health threats. *Pace* Foucault, who underestimates, we believe, the intellectual vitality generated within hospitals in general (and military hospitals in particular) during the Enlightenment, the fundamentals of a creative and investigatory anatomo-clinical medicine were falling into place long before the 1790s.[99]

[97] See J. Sgard (ed.), *Dictionnaire des journaux, 1600–1789* (2 vols.; Oxford, 1991), no. 1166. For military medical journalism more generally, see M. Martin, *Les Origines de la presse militaire en France à la fin de l'Ancien Régime et sous la Révolution (1770–1799)* (Paris, 1975). Cf. below, Ch. 12, Sect. D.

[98] Cf. Sgard (ed.), *Dictionnaire*, no. 672.

[99] The author of *Birth of the Clinic* dubs precursors of the clinic of the 1790s 'proto-clinics', and characterizes them as sites for expectant observationalism rather than active testing. The knowledge involved in such arrangements was, Foucault argues, demonstrative of prior truths rather than actively sought out. It is noticeable that Foucault has very little to say about military hospitals, which form a major plank in our argument. We are conscious of following along the lines of the critique of this element of Foucault's classic work outlined in J. Léonard, *La Médecine entre les savoirs et les pouvoirs: Histoire intellectuelle de la médecine française au XIXe siècle* (Paris, 1981), esp. 23 ff. ('la clinique ne part pas de zéro'); M. J. Imbault-Huart, *L'École pratique de dissection de Paris de 1750 à 1822, ou l'influence du concept de médecine pratique et de médecine d'observation dans l'enseignement médico-chirurgical au XVIIIe siècle et au début du XIXe siècle* (Lille, 1975); and (along a somewhat different tack) T. Gelfand, 'The Gestation of the Clinic', *Medical History*, 25 (1981), 169–80.

D. Constructing the Hospital Patient

Civilian hospitals came to figure in the net of government policy not least because of questions of cost. The high expense of the state maintaining a large military hospital establishment, notably in times of war, led government to orientate its policy around maintaining a core of military hospitals directly under the war ministry, supplementing them with a range of civilian hospitals which accepted military inmates at an agreed daily rate, the so-called *journée*. This system was in place from the 1730s and 1740s and expanded rapidly in the last decades of the Ancien Régime.[100] Towards the end of the Ancien Régime, the state also paid an honorarium to doctors and surgeons attached to those civilian hospitals which made a major contribution towards care of soldiers: staff in no fewer than sixty-six hospitals in the 1780s were salaried, or had their salaries supplemented, by the war ministry.

The invasion of civilian hospitals in wartime by hordes of sick, wounded, or convalescent soldiers sometimes brought disciplinary problems in its train: the staff at the hospital at Clermont in 1756 complained about the conduct of a recently admitted grenadier who, it was alleged, 'had no kind of sickness at all, drank, ate, and got himself as much bread, meat, and wine as he wanted; went out into town for most of the day; and when he was inside the hospital was preoccupied only with caressing the female inmates, despite the repeated warnings of the nurses in charge'.[101] The severe financial problems which, as we shall see, many hospitals endured as the century wore on meant, however, that supplementation of staff salaries and regular income of *journée* payment for sick soldiers became increasingly popular with hospital administrators. There were complaints as early as the 1740s that civilian inmates were being kicked out of hospitals to make room for soldiers, and indeed a number of smaller hospitals in Languedoc by the 1780s were reserving hospitalization solely for soldiers and extreme injury cases, and caring for local civilian inmates through outdoor relief in their homes.[102]

Hospitals geared to receiving sick soldiers enjoyed a quasi-military status as institutions *sur le pied militaire* ('on a military footing'). There were thirty such institutions in Brittany alone towards the end of the Ancien Régime.[103] In them,

[100] These changes, highly significant for both civilian and military medicine, seem to be largely ignored by the secondary literature, which concentrates on either the civilian or the military sector, with little concern for their intersection.

[101] AD Puy-de-Dôme C944.

[102] [C. S. Bernard de Ballainvilliers], 'Mémoires sur les hôpitaux' (1788), BM Montpellier MS 48 bis (hospitals at Agde, Mèze, Pézenas, Sette); AD Hérault C561 (Saint-Pons), C562, and C567 (Béziers, Bédarieux); Archives hospitalières de Lodève (Lodève); etc. For complaints about soldiers in the hospitals of the Soissonais, cf. AD Aisne C665; and in northern France generally AN M672.

[103] AD Finistère, Archives hospitalières de Landerneau E28.

as elsewhere, military regulations on health matters had to be substantially observed. For this reason, investment by civilian hospitals in military care acted as a powerful force towards acceptance of military health regulation. Medical and surgical staff on state salaries would, for career purposes if nothing else, aim to implement regulations relating to their control of care. This included dissections and medical instruction to young surgeons and medical students as well as a whole panoply of hygienic regulation. Military regulations on the frequency of medical visits also had a knock-on effect on civilian hospitals, while rules relating to separate rooms for the wounded, fever-cases, and convalescents led to a remodelling of internal space, and a move away from the big open wards of medieval design to smaller, more functionally ordered wards. From 1756 the war ministry insisted on civilian hospitals providing army-style paperwork on admissions and regimen too.

The military hospitals inspectorate was also a force for normalization. Indeed the energetic military bureaucrat Jean Colombier was appointed the first national royal inspector of (civilian) hospitals and prisons in 1780, and for the rest of the decade made wide-ranging provincial tours insisting that military-style standards were maintained in civilian hospitals. In 1784, for example, he visited institutions throughout Normandy and Picardy; in 1785 he was in Chartres, Auvergne, Langres, and numerous Languedocian institutions; in 1786 it was the turn of Châlons and Chevreuse; in 1787 of Sainte-Menehould; and in 1788 of the Anjou. Working under the orders of master of requests Chaumont de La Millière in the office of the controller-general, Colombier was empowered to call on the support of provincial intendants to insist that his recommendations on health services within civilian hospitals were implemented with military-style precision.[104]

The military influence on civilian hospitals subtly shifted the nature of relationships within these institutions. In the traditional hospital, whose values had been refurbished by Counter-Reformation piety, inmates were paupers treated out of a spirit of charity, and remedies for their sickness were viewed in a spiritual as well as a material light. Under the aegis of the military, in contrast, a more functionally therapeutic perception was targeted at inmates: they were there solely because they were sick, and the institution aimed to make them better through medical care supervised by trained physicians and surgeons in a disease-free environment. The infiltration of military personnel and regulations into the civilian hospital sector thus served to move their health-care services and hygienic standards towards the template provided by the medical services of the armed forces. The hospital inmate was increasingly viewed as a 'patient'.

[104] The paperwork from these tours is located at AN F15 226–9. For the consumer view, cf. (for Bas Languedoc hospitals) C. Jones, *Charity and 'Bienfaisance': The Treatment of the Poor in the Montpellier Region, 1740–1815* (Cambridge, 1982), 112, 127.

This allowed contemporaries to glimpse the idea of the civilian hospital, in the words of the Paris surgeon Jacques Tenon, as a 'machine à guérir' ('healing mechanism'): an institution in which medical science was perfected and in which cures were systematically achieved.[105]

The process by which the hospital inmate was being refashioned as a medical patient was accelerated by the higher level of medical encadrement which most hospitals experienced over the course of the eighteenth century. In the seventeenth century there had been a strong tendency for medical colleges and surgical communities to offer to provide a rota of service either gratis or at low cost. In the Enlightenment such a quasi-charitable gesture was increasingly replaced by the post of physician becoming a salaried one, entailing itemized services (see Table 11*c*). The Arbonnauds, a local dynasty of doctors, for example, had served the Limoges Hôpital Général from its inception in 1660 until 1765 without charging a fee. Only on the death of the last scion of the line was a salary offered.[106]

Though salaried, moreover, the physician was still an outnumbered presence within hospital walls. The salaried staff of the Hôpital Saint-Léon at Bayonne in 1762, for example, comprised some 29 persons for (probably) around 300 inmates and a foundling service: there were 2 physicians, 1 surgeon-major and 1 apothecary, but then 7 nurses (all but 1 female), 3 kitchen staff, 6 in the laundry, 4 general servants, 1 porter, 1 water-carrier, and 1 secretary.[107] Even among medical staff, moreover, physicians were normally outnumbered: for its 3,500 inmates, for example, the Paris Hôtel-Dieu could boast over the eighteenth century only 8 physicians, but around 100 surgical staff; and at the Marseilles Hôtel-Dieu, the medical–surgical ratio was 2 to 18.[108]

The clear and unidirectional shift towards payment for medical services (and towards higher salaries to boot) through the salarization of accredited staff was favoured by government bureaucrats. Hospitals' inspector Jean Colombier felt that it produced more effective service than rota systems based on a sometimes questionable charitable commitment.[109] Yet the shift was not without problems.

[105] The remark by Tenon is in BN MS FR Nouvelles acquisitions 22 743. Cf. Jones, 'Construction of the Hospital Patient', *passim*; and M. Foucault *et al.*, *Les Machines à guérir: Aux origines de l'hôpital moderne* (Paris, 1976).

[106] AD Haute-Vienne, HSup (Limoges) E1-2.

[107] P. L. Thillaud, *Les Maladies et la médecine en pays basque nord à la fin de l'Ancien Régime, 1690–1789* (Geneva, 1983), 60. The hospital was relatively unusual for a major urban hospital in not being served by a religious community. Normally the latter looked after the institution's needs in pharmacy. See above, p. 271.

[108] Gelfand, *Professionalizing Modern Medicine*, 50, 100 f., 228. For the Paris Charité hospital, the ratio was 2 : 11, and at the Invalides, 3 : 9, while within the Hôpital Général, the figures were 1 : 12 (Bicêtre) and 1 : 9 (La Salpêtrière). Ibid. 101.

[109] AD Puy-de-Dôme C1042–3. For the notion of *salarisation* in the 18th-cent. economy more widely, see F. Braudel and E. Labrousse (eds.), *Histoire économique et sociale de la France*, ii. *(1660–1789)* (Paris, 1970), 494 f.

TABLE 11c. *Honoraria/Salaries for hospital physicians and surgeons in the eighteenth century*

Place	Physician/surgeon	Honoraria/salary (*livres*)
Major Hospitals		
1638 Grenoble	M.	gratis
1694 Montpellier Hôp. Gén.	M.	50
1696 Narbonne Hôp. Gén.	Ch.	90
1705 Bordeaux Hôtel-Dieu	M., Ch.	300
1732 Montpellier Hôp. Gén.	Ch.	150 (raised from 50)
1742 Laon Hôp. Gén.	Ch.	50 (raised from 20)
1746 Montpellier Hôp. Gén.	M.	150
1766 Montpellier Hôp. Gén.	Ch.	75
1767 Grenoble Hôp. Gén.	Ch.	60
1783 Limoges Hôp. Gén.	M.	300
	Ch.	150
1785 Grenoble Hôp. Gén.	M.	120
Minor and Middling Hospitals		
1647 Embrun	M., Ch.	*charge de blé*
1664 Bayonne	M., Ch.	200
1690 Alise-Sainte-Reine	M.	75
	Ch.	50
c. 1690 Sézanne Hôtel-Dieu	M., Ch.	50
1690 Saint Pons	M.	150
1717 Collet	M.	100
1720 Mende	M.	20
1723 Frontignan Hôtel-Dieu	M., Ch.	30
1730s Mende Hôp. Gén.	M.	50
1738 Marvéjols	Ch.	36
1741 Saint Pons	M.	30
1747 Marsillargues	Ch.	17.5
1767 Beaune	M.	gratis
1772 Clermont-de-Lodève	M.	36
	Ch.	18
1774 Marseillan	Ch.	gratis
1776 Lodève	M.	24
	Ch.	12
1781 Embrun	M.	120
	Ch.	600: under military regulations
	Garçon Ch.	216: under military regulations

M. = *médecin* (physician); Ch. = *chirurgien* (surgeon)

Sources: *Major Hospitals*: Bordeaux: AN S 6162; Grenoble: AD Isère, Archives hospitalières de Grenoble E 6, E 21, E 22; Laon: AD Aisne: Archives hospitalières de Laon 12E12; Limoges: AD Haute-Vienne, Archives hospitalières de Limoges E2; Montpellier: AD Hérault, Archives de l'Hôpital Général de Montpellier (antérieures à 1790) E 14, E 20, E 25; Narbonne: AM Narbonne. Archives hospitalières de Narbonne F1.

Minor and Middling Hospitals: Alise-Sainte-Reine: AD S6174; Bayonne: AD Pyrénées-Atlantiques, Archives hospitalières de Bayonne E17; Beaune: AD Côte-d'Or C375; Clermont-de-Lodève: AD Hérault, Archives hospitalières de Clermont (unclassified documents); Collet: AD Lozère, HSup 13; Embrun: AD Hautes-Alpes, Archives hospitalières d'Embrun 2HSup 97, 142; Frontignan: AD Hérault C561; Lodève: AD Hérault, Archives hospitalières de Lodève (unclassified documents); Marseillan: AD Hérault, Archives hospitalières de Marseillan (unclassified documents); Marsillargues: AD Hérault, Archives hospitalières de Marsillargues GG28; Marvéjols: AD Lozère, E Dep. Marvéjols E11; Mende: AD Lozère H953; Saint-Pons: J. Sahuc, 'Notes historiques sur l'hospice de Saint-Pons', in *Inventaire sommaire des archives hospitalières de Saint-Pons* (Montpellier, 1910), 18 ff.; Sézanne: AN S6176.

At Beaune in 1767 the hospital administrators complained that they could not afford a doctor: the older generation and the wealthiest practitioners were too busy to take on the poorly paid job of hospital doctor, while the young newly qualified physicians were too inexperienced.[110] Smaller hospitals and those in more backward areas such as the Auvergne maintained the old charitable arrangement down to the end of the Ancien Régime.[111] None the less, salarization was becoming the rule by the last decades of the Ancien Régime in institutions of substance. More could be demanded of salaried staff, so that the long-term shift in this direction coincided with more assiduous attendance and medical requirements.

As Table 11*c* shows, the salaries involved in hospital service were, with some exceptions, notably in the military sector, not outstanding. Yet if hospital service was not a way of making a fortune, it could be a way of establishing a reputation.[112] The movement towards salarization dovetailed with a greater willingness on the part of medical men motivated by the Enlightenment to offer their services for career, as well as altruistic, reasons. Long before the hospital was prioritized as a research locale, individual hospital physicians had seen the potential for developing experiential knowledge within it. The spirit of prudent, devoted observationalism which characterized their endeavours was exemplified by the project of the Montpellier-trained physician Jean Razoux to compile a clinical record of the thousands of inmates passing through the Hôtel-Dieu of Nîmes in the late 1750s and early 1760s.[113] 'By the sickbed, observe much and reason little,' was Razoux's watchword, as he undertook a massive task of comparison, contrast, and contextualization. He utilized Boissier de Sauvages's nosological classificatory model to tabulate clinical results, and flanked his copious bedside observations and information of post-mortems with extensive data on climate derived from thermometer, barometer, and weathercock. The project, with its neat combining of public utility with improvement in the techniques of healing, drew plaudits from Boissier de Sauvages himself, who a few years earlier had seized the opportunity afforded by his office as physician attached to the Montpellier Hôpital Général to conduct some of the first experiments in electrotherapy, not only electrifying cadavers to test the contractability of the human epidermis but also passing a current through the bodies of a

[110] AD Côte-d'Or C375. [111] AD Puy-de-Dôme C1393.

[112] Compare the data in Table 11*c* with the information on income above, Ch. 8, Sect. E.

[113] [Jean] Razoux, *Tables nosologiques et météorologiques très-étendues dressées à l'Hôtel-Dieu de Nîmes depuis le 1er juin jusques au 1 janvier 1762* (Basle, 1767); the 'Préface', 3–16, outlines the intellectual stakes at issue. There is useful commentary and analysis of the project in C. Jones and M. Sonenscher, 'The Social Functions of the Hospital in Eighteenth-Century France: the Case of the Hôtel-Dieu of Nîmes', in Jones, *Charitable Imperative*; and in Riley, *Eighteenth-Century Campaign*, 45 ff.

number of institutionalized paralytics.[114] 'If anything is capable of perfecting our art,' Boissier wrote to Razoux, 'it is work like this executed over fifty years by thirty-odd physicians.'[115] Such sentiments were to receive a further boost in the efforts of the Royal Society of Medicine from the late 1770s, which displayed a similar blend of Enlightenment societal optimism and empiricist *pointillisme*.[116]

Hospital service, now celebrated in the cause of human perfectibility, was thus increasingly viewed as a medical and research desideratum. Indeed hospital administrators at Saint-Yrieix in the Limousin even ingeniously considered cashing in on this under the scheme to sell the post of surgeon to the highest bidder as a means of raising much-needed revenue.[117] Furthermore, the new ethos was quickly internalized by medical students, who began to ape their surgical colleagues and spend a period of time in the hospital. Even as Enlightenment surgery was transforming its training routines in imitation of physic, trainee physicians began to model themselves on surgeons and seek a kind of hands-on apprenticeship at the hospital bedside. Indeed, Montpellier students seem to have concluded that they could only impress their future clients if they could show a hands-on familiarity with anatomy and physiology. It was for this reason that they pressurized their professors in the years before the Revolution (albeit to no avail) to modernize their teaching by introducing official clinical hospital-based courses.[118] Medical students therefore now joined young surgeons in the usually informal instruction conveyed to interns within hospital walls. In many locations, moreover, informal training hardened into formal structures of instruction. As we have seen, military regulations insisted on training courses in those civilian hospitals *sur le pied militaire*, and the trend was present in all institutions of substance.[119]

A pivotal figure in many institutions in providing this tuition was the *gagnant-maîtrise* surgeon.[120] The *gagnant-maîtrise* was a journeyman surgeon who was attached as a living-in resident in a hospital, in return for which he was entitled to a mastership of the local community after six years' continuous service. This was an anti-monopolistic arrangement which was highly unpopular with local practitioners. It usually, however, produced more assiduous and obedient ser-

[114] AD Hérault 10F51 (Boissier's day-book). [115] Razoux, *Tables*, 14.

[116] See below, Ch. 12, Sect. D. [117] AD Haute-Vienne HSup (Saint-Yrieix) E1.

[118] This is the argument in C. Jones, 'Montpellier Medical Students and the Medicalisation of Eighteenth-Century France', in R. S. Porter and A. Wear (eds.), *Problems and Methods in the History of Medicine* (London, 1987).

[119] See above, Sect. D.

[120] The *gagnant-maîtrise* system, sketched out in Gelfand, *Professionalizing Modern Medicine*, esp. 51 ff., 99 ff., could repay closer attention than historians have granted it. The same scheme sometimes applied to apothecaries, and was standard as regards many trades in which instruction was offered to foundlings and orphans in the major *hôpitaux généraux*.

vice than charitable arrangements with local communities—and was thus popular with hospital administrators. Though the letters patent accorded the Montpellier Hôpital Général in 1678 had provided for a *gagnant-maîtrise* surgeon, the local community had prevailed on the administrators to accept a scheme of local master-surgeons providing free service on a quarterly basis. But the scheme failed to ensure inmates regular and unfailing care, and in 1704 the hospital administrators reverted to a *gagnant-maîtrise* system and stayed with it.[121]

The *gagnant-maîtrise* was often in charge of in-house teaching, and had access to cadavers which made him an important man to know for any young surgeon or tiro physician. The surgical expertise of such men was often the basis of outstanding careers.[122] The open competition which many hospital administrators ran for the post was eagerly contested, especially by dedicated surgical interns: newspapers reported the public sessions at which operation-cum-examinations were performed and posts awarded.[123] In some cases, moreover, *gagnants-maîtrise* or their superiors among the local surgical community put on courses to which outsiders were allowed to come. The eighteenth century saw this become standard practice in the Parisian hospitals, while in the provinces the Marseilles Hôtel-Dieu had led the way in 1687, but Grenoble adopted the practice in 1761, Clermont in 1769, and so on.[124]

Hospital administrators—usually local dignitaries who perceived their role as a means of attaining civic status and as a religico-charitable gesture—welcomed these new medical inputs into hospital life. A better-run medical service was championed as a means of aiding suffering humanity. Yet if hospital administrators had ideas about the importance of medicine in performing their traditional charitable tasks, those ideas were not always identical to those of medical men, and administrators often remained well disposed towards the medical penumbra. The administration of the Paris Hôtel-Dieu utilized the services of three generations of the Colot dynasty of lithotomists from the middle of the sixteenth century onwards: only from the late seventeenth century did the view prevail that lithotomy was a trained skill in which emphasis on trade secrets

[121] AD Hérault, Archives de l'Hôpital Général de Montpellier (antérieures à 1790) F2. Cf. AFMM L49, L52. Local surgeons were still fighting a rearguard action about the post in the last decades of the Ancien Régime: AFMM N118 (and cf. AFMM N57–62, for arrangements in other provincial hospitals).

[122] Gelfand, *Professionalizing Modern Medicine*, 114 (citing Louis, Tenon, Alexis Boyer (1757–1833), *et al.* as exx.).

[123] For the Paris Charité hospital, see *Affiches de Paris*, 12 Mar. 1753; for the Montpellier Hôtel-Dieu Saint-Eloi, *Recueil des annonces, affiches et avis divers du Bas Languedoc, ou Journal de la Généralité de Montpellier*, 23 May and 16 June 1785.

[124] Gelfand, *Professionalizing Modern Medicine*, *passim*; A. Villard and M. Villard, *Les Fonds des archives départementales des Bouches-du-Rhône*, i/2. *Dépôt principal de Marseille; Séries anciennes G, H* (Marseilles, 1970), 272; Prudhomme, *Inventaire sommaires*, pp. xxii–xxiii; L. Accarias, *L'Assistance publique sous la Révolution dans le département du Puy-de-Dôme* (Savenay, 1938).

smacked of the charlatanesque. The great Parisian hospital did not even have its own set of surgical instruments before 1656 and relied on those its medical men brought in with them.[125] Administrators in the eighteenth century still turned to travelling itinerants or local healers as in the past; venereal cases in Rouen were placed in an ancient prison where travelling quacks were paid to treat them; in 1709 at Vitré a cobbler inmate with special healing powers had been asked to help in cures; and as late as the middle of the eighteenth century the hospital at Sélestat brought in unlicensed outsiders in this way. The empiricist bent we have documented within Enlightenment medicine put additional pressure on the use of hospitals by many individuals from within the medical penumbra who were seeking empirical legitimation for their nostrums. In 1766 the Grenoble hospital authorities allowed the entry of one Mademoiselle Galland 'to perform trials with dressings and distribution of remedies'.[126]

Broadly speaking, however, although practitioners from the medical penumbra still inveigled their way into hospitals, by now presenting themselves as scientific and philanthropic empiricists working for the good of humanity, the general trend over the century was towards the consolidation of the authority within the hospital of medical men from within the orthodox medical community. Physicians and surgeons were undoubtedly becoming more frequent and more accepted visitors. For *hôtels-dieu* of substance, twice-daily visiting gradually became the norm, while regular, even once-daily, visiting became established in the less 'medical' *hôpitaux généraux*. Relatively small institutions began to insist on this kind of medical encadrement too.

Medical staff played an important role in maintaining the institution's hygiene and in reporting cases of epidemics.[127] However, one of their key tasks was the settlement of diagnostic boundary disputes. Administrators of *hôpitaux généraux* often had an agreement with the local *hôtel-dieu*, for example, that the latter would care for its inmates who developed more serious curable illnesses, usually at a fee. Because of the delicate nature of this decision, a physician was often given overall responsibility for it. Physicians also came to share with surgeons and nursing sisters responsibility for deciding when an individual was ready to be discharged. They were also increasingly involved with determining the sickness of would-be entrants, so as to screen out contagious, venereal, and other cases whom hospital regulations excluded.

[125] Gelfand, *Professionalizing Modern Medicine*, 26.

[126] A. Le Taillandier, *Inventaire sommaire des archives des hospices civils de Rouen* (Rouen, 1866) 196; AD Ille-et-Vilaine (Vitré) 2E11; P. Adam, *Histoire des hospices et hôpitaux de Sélestat* (Sélestat, 1960); AD Isère, Archives hospitalières de Grenoble E21.

[127] There is useful material on this consultative role of physicians in the Montpellier Hôpital Général in the 1680s, which was threatened by periodic epidemics: AD Hérault, Archives hospitalières de l'Hôpital Général de Montpellier (antérieures à 1790) E2–6.

Both hospital administrators and nursing sisters attached great importance to such controls on admission. In 1781 national hospitals' bureaucrat Chaumont de la Millière ridiculed the traditional prohibition on the admission of pregnant women to hospitals;[128] but he found it difficult to convince hospital administrators, who remained anxious not to have their institution flooded by 'disreputable' women, or to move nursing communities, who were committed to their vows of chastity and moral purity. Outside Paris, only relatively few hospitals seem to have catered for midwifery: Grenoble had set up a little 'Galilée' facility for childbirth in 1741 and rebuilt it in 1778, and the Hôtel-Dieu at Angers was receiving pregnant women in special quarters from the middle of the century. But these were exceptions.[129] Much the same problem existed for individuals suffering from venereal disease. 'Experience shows', a government bureaucrat noted sardonically, 'that this illness is only contracted as a result of a type of intercourse to which nursing sisters will not expose themselves,'[130] but such an argument cut little ice in most places. The Toulouse Hôtel-Dieu established a separate ward for venereal cases, and the hospital at Bayonne did the same in 1785, charging 100 *livres* for a full course of treatment. From 1768 pressure on hospitals for venereal treatment was relieved by the government's decision to use recently created *dépôts de mendicité* as infirmaries for public prostitutes, camp-followers, and others wishing to undergo the so-called *grands remèdes* for syphilis. Indeed, many *dépôts* turned into dumping-grounds for cases rejected by the hospitals (contagious illness, pregnancy, insanity, etc.).[131]

Special arrangements for the care of the insane in a growing number of *hôtels-dieu* and other hospitals marked a wish to keep a particular species of incurable case from the more medicable ranks of the physically sick (see Table 11*d*). Medical treatment was rarely systematically attempted outside the Paris Hôtel-Dieu (where stays were limited to six weeks) and a number of hospitals (including the famous asylum at Charenton) staffed by the Brothers of Charity, who had a good reputation for cures.[132] Treatment mixed medical care with first, more gentle treatment, and second, with a stress on the importance of the surroundings in effecting cures. (These latter two points prefigured developments in psychiatry from the 1790s.) For inmates from families who could afford the treatment at

[128] AD Aisne C749.

[129] AD Isère, Archives hospitalières de Grenoble E12, E25; AN M680 (Angers); H. Carrier, *Les Origines de la Maternité de Paris: Les Maîtresses sages-femmes et l'Office des accouchées de l'ancien Hôtel-Dieu, 1378–1796* (Paris, 1888).

[130] AD Hérault C564.

[131] F. Buchalet, *L'Assistance publique à Toulouse au XVIIIe siècle* (Toulouse, 1904), 35 ff.; AD Pyrénées-Atlantiques, Archives hospitalières de Bayonne E2; and (for the *dépôts*) AD Puy-de-Dôme C1195, C1202, and AD Hérault C141, C562, C568.

[132] D. B. Weiner, 'The Brothers of Charity and the Mentally Ill in Pre-Revolutionary France', *Social History of Medicine*, 2 (1989), 132–7.

TABLE 11*d*. *Establishment of facilities for the insane in hospitals: some provincial examples*

Year	Place	Type of facility
1651	Carcassonne	Hôpital
1687	Rouen	Hôpital Général: *loges*
1688	Saint-Malo	*loges*
1699	Marseilles	institution (old leper house of St Lazare)
1699	Aix-en-Provence	institution
1707	Clermont	Hôtel-Dieu: 10 *loges*
1715	Montpellier	Hôtel-Dieu Saint Eloi: *loges*
1725	Dijon	Hôtel-Dieu: *loges*
1731	Grenoble	Hôpital Général
1739	Béziers	Hôpital Général: 5 *loges*
1750	Angers	*loges*
1755	Verdun	Hôtel-Dieu Ste-Catherine: *loges*
1759	Quimper	Hôpital Général: 3–4 *loges*
1762	Niort	Hôpital Général: *loges*
1763	Albi	Hôpital Général: 12 *loges*
1770	Alise-Sainte-Reine	Hôpital
1786	Landerneau	Hôpital: *loges*

Sources: J. C. Héliès, 'Aperçu sur les hôpitaux de Carcassonne, Toulouse, thesis, 1977; Le Taillandier, *Inventaire sommaire*; AD Ille-et-Vilaine, Archives hospitalières de Saint-Malo 2E1; J. B. Lautard, *La Maison des fous de Marseille: Essai historique et statistique sur cet établissement depuis sa fondation en 1699 Jusqu'en 1837* (Marseilles, 1840); J. Alliez *et al.*, 'L'Hospice des insensés de la Trinité à Aix-en-Provence', *Histoire des Sciences médicales*, 1977; AD Puy-de-Dôme C7552, C954; Joly de Bévy, *Histoire de l'Hôpital de Saint Esprit et Notre-Dame de la Charité de la ville de Dijon* (1781) at BM Dijon MS 625, p. 160; AD Isère, Archives hospitalières de Grenoble E10; A. Soucaille, 'Notice sur l'Hôtel-Dieu Saint-Jacques ou Hôpital Mage de Béziers', *Mémoires de la Société archéologique de Béziers*, 20 (1883), p. 371; C. Port, *Inventaire des archives anciennes de l'Hôpital Saint-Jean d'Angers, précédé d'une notice historique et suivi d'un cartulaire de cet hôtel-dieu* (Angers, 1870), p. xxx; L. H. Labande, *Département de la Meuse, Ville de Verdun: Inventaire sommaire des archives hospitalières antérieures à 1790* (Verdun, 1894), p. xxxiv; J. H. Libéral, *Les Hôpitaux de Quimper* (Paris, 1941), 42; L. Merle, *L'Hôpital du Saint-Esprit de Niort (1665–1790). Contribution à l'histoire de la lutte contre la mendicité sous l'Ancien Régime* (Niort, 1966), 129 f.; B. Pailhas, 'Enfermerie diocésaine ou primitif asile d'aliénés d'Albi?', *Bulletin de l'histoire de la médecine* (1902), 80 f.; M. Bolotte, *Les Hôpitaux et l'assistance dans la province de Bourgogne au dernier siècle de l'Ancien Régime* (Dijon, 1968), 293; 1 AD Finistère, Archives hospitalières de Landerneau E7.

the Charenton monastery, for example—pensions ranged from 600 to 1,000 *livres* a year, and the infamous marquis de Sade was confined here in 1789 and 1790 at the rate of 4,000 *livres* per annum—treatment could be good. An appeal was made to the civilized values of the insane. Inmates were allowed to ramble in the spacious gardens of the monastery on the banks of the Seine, so as to imbibe the healing powers of Nature, while there was also free and easy access to books

and newspapers, billiard tables, chess and card facilities, as well as a careful mixture of different therapies.[133]

In most cases, the segregation of the insane was seen as a blessed relief for other types of inmate, whose tranquillity was rudely inconvenienced by lunatic caterwauling. 'The sick who languish in [the hospital]', it was noted at Marseilles, 'ought not to be upset by the racket that this sort of people never fail to cause, nor should the chaste ears of the very young who are confined here be exposed to hearing all the filthy words which are so familiar to the insane, thus breaking up the order which has been established here.'[134] In the Paris Hôpital Général, one of the most feared punishments for inmates was being placed in the *quartier Saint-Prix*, where the insane were lodged.[135] Many *hôtels-dieu* excluded the insane altogether, but over the course of the century there developed a strong motive for hospitals of all sorts to engage in this service; namely, the pensions which institutions were able to charge public authorities, families, and private individuals for the sheltering and sustenance of the insane which constituted a useful source of income.[136]

There was indeed a lingering, atavistic fear that certain forms of insanity might be considered contagious, and this influenced arrangements to erect a kind of internal cordon sanitaire to rope them off in many institutions. This extended to the case of epilepsy, which was promiscuously categorized alongside lunacy. Special premises for lunatics thus often in time came to include epileptics. Occasionally, as at Grenoble in 1778, special rooms were affected for 'epileptics and other contagious illnesses'.[137] The contagious category also extended to scurvy, victims of which were uniformly excluded from admission to most hospitals. Greater public awareness of the need for treatment facilities for such cases slowly emerged over the century. At Riom in 1736, the Hôpital Saint-Jean des Abandonnés was established precisely for contagious cases and other individuals whose illness meant their exclusion from normal hospitals, and a similar institution, the Hôpital du Sauveur, was established in Marseilles in 1765.[138] Elsewhere a handful of hospitals affected special wards or buildings

[133] There was, however, a darker side to Charenton: about half the inmates had been imprisoned by *lettre de cachet* and were kept in tight security. For an informed account, see 'Notice historique et statistique sur la maison royale de Charenton' in AN AJ287. See too 'Origine de l'Établissement et Fondation des Frères de la Charité à Charenton Saint-Maurice' (Apr. 1791) in AN F15 2608.

[134] J. Alliez *et al.*, 'L'Assistance aux malades mentaux au XVIIIe siècle à Marseille', *Histoire des sciences médicales*, 10 (1976). For a review of institutions of care, see P. Sérieux and L. Libert, *Le Régime des aliénés en France au XVIIIe siècle* (Paris, 1890).

[135] P. Bru, *Histoire de Bicêtre (hospice–prison–asile)* (Paris, 1890), 163.

[136] See above, Ch. 10, Sect. D.

[137] AD Isère, Archives hospitalières de Grenoble E25. For the same equation, cf. AD Hérault, Archives hospitalières de Béziers, Hospices de Béziers IIE9.

[138] AD Puy-de-Dôme C990; Villard and Villard, *Fonds des archives*, i/2. 303 ff.

for contagious cases: this was so in Montpellier in the 1680s and 1690s and in the Toulouse Hôtel-Dieu in 1758 for scurvy victims and at Angers from about 1750 for those suffering from tinea and scabies.[139]

This kind of change led to changes in hospital layout and, in time, in architecture. Formerly, the most common form of segregation within hospital space was between men and women—and even this had sometimes proved difficult to achieve in the big hall-like structures which since the Middle Ages had formed the principal lodging within many institutions.[140] Now fever cases were more routinely screened from individuals with wounds; the curable were separated from the incurable; and special cases (insane, mothers in childbirth, and so on) were increasingly found segregated quarters. There was a move, sometimes sparked by military regulations, for new medical services to have specialized space carved out of the fabric for them. Thus operation theatres and/or dissection rooms, for example, were created: this was the case at Montpellier in the 1760s, at Bayonne in 1773, at Marseilles in 1779, at Verdun in 1789, and so on.[141]

Changes in design and architecture attested to the tendency for the growing medical presence within the hospital to come into conflict with established patterns of vocational territoriality, notably as regards the role of the nursing communities. The hospital take-over performed by the latter since the early seventeenth century had led to the provision of better nursing, minor surgical, and pharmaceutical care, with a greater emphasis on the dignity of the pauper as a 'suffering limb of Christ' and a 'Christian brother'. Even if it was only as a secondary gain from nursing communities' drive for spiritual purity, hospitals were cleaner, healthier places. Trained medical staff, on the other hand, had a less holistic, less fraternal, more materialistic, and more reified view of the pauper as essentially a patient: a carrier of medical symptoms who should be subject to observation and even limited experimentation. Two versions of what were the nature, aims, and ethics of medicine and the medicable thus came into conflict within the late Enlightenment hospital. The medical men tended to conceive of this struggle as one pitching medicine versus anti-medicine, enlightened science versus obscurantist mumbo-jumbo. In fact, a far more nuanced and more complex struggle, whose gender dimension should not be underestimated, was

[139] For Montpellier, sources as at n. 127; Buchalet, *Assistance publique à Toulouse*, 31 ff.; AN M680 (Angers).

[140] D. Leistikow, *Ten Centuries of European Hospital Architecture* (Ingolheim-am-Rhein, 1967); A. Payen, 'L'Architecture hospitalière et l'art dans la province française aux XVIIe et XVIIIe siècles', thesis, Archives de l'Assistance Publique, Paris.

[141] Jones, *Charity and 'Bienfaisance'*, 129; AD Pyrénées-Atlantiques. Archives hospitalières de Bayonne E17–21; Villard and Villard, *Fonds des archives*, i/2. 272; and L. H. Labande, *Département de la Meuse, Ville de Verdun: Inventaire sommaire des archives hospitalières antérieures à 1790* (Verdun, 1894), 168.

going on between hospital-based practitioners over the definition, character, and parameters of medical care.

Disputes between medical men and nursing communities came to run in counterpoint to more classic confrontations between doctors and surgeons—and constituted a tough and resilient check on the medicalization of the hospital solely on the terms of the physician or surgeon.[142] In the Nîmes Hôtel-Dieu, Razoux found his ambitious plans for clinical statistics treated with incredulity and suspicion by hospital personnel. Tension here, and elsewhere, crystallized over a range of issues. Nursing sisters resented the growing independence of surgeons over the century, and sensitively hung on to their customary precedence over apprentice surgeons, whom they represented (with no little justification) as lewd and licentious oafs.[143] Medical students constituted another growing conflict area. The Parisian glazier Jean-Louis Ménétra, who entered the Hôtel-Dieu in Montpellier in 1760 as a smallpox case, found the students hanging in droves from the rafters to get a good look at him when the physician visited.[144] Tighter regulations as the century wore on aimed to restrict the inconveniences such students caused inmates. At the hospital in Rennes, for example, it was stipulated that students were not to engage in 'chattering, running, walking in groups, talking loudly, singing, whistling, or swearing'.[145]

Students' predilection for dissections was particularly resented by nursing sisters, who also found it difficult to accept the greater, clinically motivated concern of trained physicians and surgeons for post-mortem autopsy. At the turn of the century Protestant inmates who died within Montpellier's Hôtel-Dieu had been viewed as especially suitable guinea-pigs for autoptic study: 'as fanatics [i.e. Protestants] unworthy of proper burial are dying in large numbers', the hospital's administrators had chillingly noted in 1703, 'they are more suitable for instruction than others since we can do what we like with these subjects'.[146] This special treatment for religious dissidents seems to have declined over the century, causing problems of cadaver scarcity. If in military and naval hospitals, medical staff enjoyed free and easy access to cadavers for dissection, in civilian *hôtels-dieu*, in

[142] For the general argument, see Jones, 'Constructing the Hospital Patient'; id., *Charitable Imperative*, 17 ff.

[143] For exx. of conflict involving surgeons, see BN Joly de Fleury 1302 (Paris Petites-Maisons hospital, 1729), and 1267 (Rebais Hôtel-Dieu, 1760s). The most copiously documented account of such conflict concerns the clash at the Paris Hôtel-Dieu in the 1780s involving the surgeon Desault: see L. S. Greenbaum, 'Nurses and Doctors in Conflict: Piety and Medicine in the Paris Hôtel-Dieu on the Eve of the Revolution', *Clio Medica*, 13 (1979), 247–67; and Gelfand, *Professionalizing Modern Medicine*, 117 ff. For reactions to Razoux, see *Tables*, 10.

[144] J. L. Ménétra, *Journal of My Life*, Eng. trans., ed. D. Roche (New York, 1986), 66.

[145] AD Ille-et-Vilaine, Fonds Hardouin 23F2238. For the Montpellier Hôtel-Dieu, cf. the regulations at AD Hérault, Archives de l'Hôtel-Dieu de Montpellier (antérieures à 1790) E8 (19 July 1760).

[146] AD Hérault, Archives de l'Hôtel-Dieu Saint-Eloi de Montpellier (antérieures à 1790) E1.

contrast, scientific uses of cadavers were perennially inhibited by nurses' attitudes of benevolent concern for the sensibilities of the poor, who resented their bodies ending up as fodder for surgical horseplay by unruly students (plus sometimes a feeling that dissection embodied a kind of irreligious desecration).[147]

In Montpellier, matters were slightly eased when Montpellier-trained premier surgeon La Peyronie died leaving a 2,000 *livres* bequest to the city's two main hospitals, precisely so as to provide the city surgeons with the cadavers they required. Even then there were complications. The Hôpital Général turned the legacy down flat, on grounds of the anxiety it would cause among inmates. At the Hôtel-Dieu, it was stipulated that the cadavers were not to be utilized in any way which might occasion scandal: they were handed over, at night, to authorized physicians and surgeons under the personal surveillance of a hospital administrator, who was allowed to veto the use of women, soldiers, or Montpellier residents.[148] Despite such efforts at regulation, the question of medical cadavers continued to cause emotional responses: gravedigging was a perennial cause of popular offence; popular 'dissecting riots' occasioned in Montpellier, Lyons, and doubtless elsewhere; and a grumbling war of position continued within hospital walls opposing nursing sisters and medical men.[149]

Questions relating to regimen constituted a further cause of conflict in many places. Attempts to bring the hospital pharmacy, first of all, under the control of trained medical staff ran into opposition from nursing sisters who, as we have seen, were invariably in charge of the composition of simple remedies and who ran the institutional apothecary-shop. In most cases, moreover, the sisters prevailed, and kept pharmacy matters under their aegis.[150] Inmate diet was a further bone of contention. The traditional division of responsibility whereby nurses looked after food, and doctors concerned themselves with medication, was break-

[147] See e.g. AD Hérault, Archives de l'Hôtel-Dieu Saint-Eloi de Montpellier (antérieures à 1790) E11 (deliberation, 4 Apr. 1772), and the discussion in Jones, *Charity and 'Bienfaisance'*, 125.

[148] BM Montpellier MS 116; AD Hérault, Archives de l'Hôpital Général de Montpellier (antérieures à 1790) E21, and Archives de l'Hôtel-Dieu Saint-Eloi de Montpellier E11 (4 Apr. 1772).

[149] AD Hérault C524; AFMM S16 (gravedigging); AD Hérault C527 (dissection riots, Montpellier); and for Lyons, J. Lacassagne, 'Le Collège de médecine de Lyon et l'émeute populaire de 1768', *Cahiers lyonnais d'histoire de la médecine*, 6 (1961), 3–22. For intra-hospital tensions, cf. Archives hospitalières de Dijon E52 (1776); and F. Lebrun, *Les Hommes et la mort en Anjou aux XVIIe et XVIIIe siècles: Essai de démographie et de psychologie historiques* (Paris, 1971), 106.

[150] For exx. of the conflict, see AD Vaucluse, Archives hospitalières d'Apt E6 (1754); BM Narbonne, Archives hospitalières de Narbonne E14, E15 (Narbonne, 1785–6); AN F15 226 (Montpellier); AN S6180 (Yeres); AN S6160 (the Paris Invalides); and R. Massy, 'A l'Apothicairerie de l'Hôtel Royal des Invalides: Le Conflit entre l'administration de l'Hôtel et les Filles de la Charité' *Revue d'histoire de la pharmacie* (1954), 315–24. For the continuing importance of the communities in pharmaceutical provision, see *Situation administrative et financière des hôpitaux et hospices civils de l'Empire* (2 vols.; Paris, 1869), vol. ii, p. xxxiii, which shows sisters in charge of half of France's hospital pharmacies.

ing down under the influence of physicians' growing neo-Hippocratic sensitivity to the non-naturals in overall therapeutic strategy.[151] Physicians' preference for limiting intake in the interests of cure conflicted with the rather looser definitions of the nursing sisters who, true to the traditional equation of the pauper inmates with Christ, felt impelled to offer them all they could manage to eat. Established in the seventeenth century when famine had been one of the greatest threats to life, moreover, most nursing communities also tended to view much of their task as akin to famine relief, and to prize highly the therapeutic value of good substantial intakes of food. From mid-century physicians started to argue that overeating was a major cause of institutional mortality. 'The sick eat too much,' complained the administrators of Montpellier's Hôtel-Dieu in 1770, noting that 'indulgence by the sisters of charity for the sick leads them into giving too much food to those suffering from wounds, and more than the physician has allowed them for their condition'. At nearby Nîmes, Razoux made much the same point: inmates were 'given too much food'. Even if one remains sceptical about the veracity of such claims, they still highlight the bitterness of the struggle on an area of dispute in which competing versions of medicalization were clearly at issue.[152]

It was not simply the nursing sisters who suspected the motives and the altruism of physicians and surgeons, hospital administrators often did so too. Drawn from the cream of local society, they nurtured a general aura of disinterested concern for the susceptibilities of the inmates. Long after the medical men were reconceptualizing inmates as medical patients, administrators held onto a notion of the hospital inmate as a suffering pauper and fellow-Christian. The administrators of the Montpellier Hôtel-Dieu noted:

> What will be the consternation of the sick pauper when faced with a crowd of students and when they hear the physician explain to them the character of the illness, the danger in which the pauper finds himself, how little can be done to save him—this knowledge often anticipated and never handled sensitively? Will this not throw him into despair? Will this not produce another illness even sorrier than that which he already has?[153]

Around the same time, the administrators resisted efforts by the Montpellier Medical Faculty to establish within their institution a clinical teaching ward with much the same set of arguments, evoking

[151] For the related interest in air, see above, Ch. 7, Sect. E, and below, Ch. 12, Sect. C.

[152] AD Hérault, Archives de l'Hôtel-Dieu Saint-Eloi de Montpellier (antérieures à 1790) E11. On this issue generally, see Greenbaum, 'Nurses and Doctors'; R. Mandrou, 'Un problème de diététique à l'Hôtel-Dieu de Paris à la veille de la Révolution', *93e Congrès National des Sociétés Savantes* (Paris, 1973); and (for accusations regarding overeating), Pierre Fournier, 'Observations qui ont regné dans l'Hôtel-Dieu de Montpellier pendant l'année 1763, suivies d'observations sur plusieurs maladies particulières', *Recueil d'observations de médecine des hôpitaux militaires*, 1 (1760) and Razoux, *Tables*, esp. 44.

[153] AD Hérault C525 (ex. from 1775). Cf. L. Dulieu, *Essai historique sur l'Hôtel-Dieu Saint-Eloi de Montpellier, 1183–1950* (Montpellier, 1953), 104 ff., 143 ff.

the alarm and the fear our paupers will derive from being taken out of the hands of the ordinary physician, in whom they will have begun to trust, to be dragged willy-nilly into a room in which they will think themselves surrounded by the shadows of death and where indeed more of the sick die than in any other room, because the professor will not fail to select the sick who will be in the greatest danger [of dying].[154]

This kind of thinking in the premier medical city of provincial France was effective in blocking the consistent efforts of the Montpellier Faculty in 1715, 1760, 1768, and 1774 to set up teaching facilities within the hospital. The hospital even made its medical staff resign if they took up a post as professor in the Faculty. The determination to keep the hospital independent of the teaching needs of the faculty in particular and the corporative medical community as a collectivity were echoed elsewhere—at Angers, for example.[155] As a result, the use of the hospital as a research-based locale remained limited. Hospital regulations at Dijon specifically forbade physicians and surgeons from 'choosing inmates to perform experiments on their persons'.[156] Experiments tended to have to be conducted informally and in private, however; both hospital administrators and nursing sisters strictly scrutinized medical and surgical practice for anything which might result in public scandal or inconvenience other inmates.

Yet though hospital administrators were wary of allowing medical men to fracture patterns of territoriality built up within hospitals over numerous generations, they did frequently defer to them in cases where their help seemed promising. Care of defenceless children was one such case, which neatly illustrated the growing medical concern for species of distress formerly outside the parameters of hospitalization or else denied medical surveillance. The death rates of foundlings, abandoned and orphaned children, and babies from impoverished families under the aegis of hospitals were frighteningly high. Whereas, as we shall see, hospital mortality generally was in long-term decline, this does not appear to have been the case for young children: in Caen in the early seventeenth century, four out of ten foundlings reached their tenth birthday; at the end of the Ancien Régime, only two did so—in Paris, the figure was half that.[157] The growth of the practice of abandonment over the course of the century meant a larger volume of child-mortality, while the fact that the Paris

[154] AD Hérault, Archives de l'Hôpital Général de Montpellier (antérieures à 1790) E38.

[155] C. Port, *Inventaire des Archives anciennes de l'Hôpital Saint-Jean d'Angers* (Angers, 1870) pp. xxiv–xxv (case in 1751).

[156] L. Lallemand, *Histoire de la charité* (5 vols.; Paris, 1909–12), iii. *Les Temps modernes* (*XVIe–XVIIIe siècles*) (Paris, 1912), 553.

[157] Dupâquier (ed.), *Histoire de la population*, ii. 483–4. As a marker, it will be remembered that roughly one child in four died before its first birthday, and another one in four died before becoming an adult. Cf. ibid. 222 ff.

Enfants-Trouvés hospital became a dumping-ground for the unwanted children of northern France gave the problem a good deal of cultural visibility in the capital. As medical ideas over the century displayed a greater sensitivity to pediatric concerns, moreover, and as a crude statistical sensitivity began to display itself, this problematic 'massacre of the innocents' became a major topic of debate.[158] A wide gamut of measures was introduced within hospitals, under the advice of consulting physicians, to try to reduce mortality rates both within hospitals and for children sent out to wet-nurses. There were frequent experiments on babies' diet in particular, as well as a characteristic emphasis on the need for cleanliness and an end to bad smells: in the last decades of the Ancien Régime, for example, the Grenoble hospital administrators introduced annual medical visits to all wet-nursed babies, built baths for them within the hospital, tried out goat's-milk for sustenance, and launched major initiatives to instil cleanliness in the foundlings service.[159] Such initiatives rarely, however, achieved any measurable and durable success. Over the Enlightenment hospital hovered the spectre of the dead baby.

E. The 'Black Legend' of the Hospital in the Late Enlightenment

The suffering of babies—hospitals' inspector Jean Colombier found them four or five to a crib in rooms with over a hundred foundlings in some hospitals[160]—was a much-foregrounded issue in a wider debate in the last years of the Ancien Régime which revolved around the putative inutility, and even the lethality, of the traditional hospital. A Black Legend developed according to which the hospital was a serious health hazard rather than an aid to health. This view contaminated—and indeed continues, in the historiography, to contaminate—all discussions of hospital care.[161]

Much of the antipathy towards the traditional hospital revolved around issues of political economy rather than medicine. As we have seen, around

[158] J. N. Biraben, 'Le Médecin et l'enfant au XVIIIe siècle (Aperçu sur la pédiatrie au XVIIIe siècle)', *Annales de démographie historique*, 10 (1973), 215–23; O. Hufton, *The Poor of Eighteenth-Century France, 1750–89* (Oxford, 1971); C. Delasselle, 'Abandoned Children in Eighteenth-Century Paris', in R. Forster and O. Ranum (eds.), *Deviants and the Abandoned in French Society* (Baltimore, 1978).

[159] AD Isère, Archives hospitalières de Grenoble E22. For similar campaigns, see Jones, *Charity and 'Bienfaisance'*, 104 ff.; A. Molinier, 'Enfants trouvés, enfants abandonnés et enfants illégitimes en Languedoc aux XVIIe et XVIIIe siècles', *Hommage à Marcel Reinhard* (Paris, 1973).

[160] Molinier, 'Enfants trouvés, enfants abandonnés et enfants illégitimes', 463.

[161] C. Bloch, *L'Assistance et l'état en France à la veille de la Révolution* (Paris, 1908) remains an excellent overview of the debates. See too C. Duprat, *Pour l'amour de l'humanité: Le Temps des philanthropes: La Philanthropie parisienne des Lumières à la monarchie de Juillet* (2 vols.; Paris, 1994–). In a rather different vein, see Foucault *et al.*, *Machines à guérir*. For the notion of the Black Legend, see Jones and Sonenscher, 'Social Functions of the Hospital', 49 ff.

mid-century the position of the *hôpitaux généraux* as the centrepiece of the state's social welfare policies was collapsing. Their mercantilistic objectives had proved unattainable; it seemed impossible to organize work inside them in a way which made regular or worthwhile profits. Their policing role was also in tatters. They tended to group together the aged and the defenceless young, and had given up the struggle against dangerous marginals and beggars, which had been assigned them in the 'Great Confinement of the Poor'. After 1767 the state's anti-vagrancy laws were bypassing the *hôpitaux généraux* and revolved around new, state-run workhouses, the *dépôts de mendicité*.[162] In these, moreover, tough secular discipline rather than enforced piety was the rule: the proselytizing aims and aura of enforced piety which had always characterized the *hôpitaux généraux* seemed increasingly archaic and outmoded in an era of creeping dechristianization.

The *hôpitaux généraux* seemed to be living on borrowed time. And as they went down in public esteem, they risked bringing all other hospitals down with them. In 1777 the Academy of Châlons-sur-Marne held a prize essay competition on 'The Means of Destroying Begging by Making Beggars Useful to the State but Without Making Them Unhappy'—very much, of course, an updated version of the task originally assigned the hospitals. Yet out of a host of entries, only a single author urged a positive role for the *hôpitaux*.[163] The campaign against them built up in many ways. Voltaire and Montesquieu were, for once, agreed that the *hôpitaux*, far from preventing begging, actually seemed to encourage it, by deterring workers from planning their futures rationally, since they could dump their unwanted children at the doors of the *hôpital*, and themselves seek refuge there in old age. The abbé Récalde and others accused the administrators of *hôpitaux* of corruption, peculation, and inhumanity.[164] In 1765 Turgot, *philosophe* and future controller-general, lambasted the juridico-religious principle of the foundation on which most institutions were based: the *fondation*—a legacy with perpetual strings, so to speak—represented a particularly noxious form of privilege, and as such, marked a capricious egotism, he argued, which restricted the scope of governments for devising social policies duly adapted to the needs of the day.[165] Almost without exception, those calling for reform of social policies routed their reforms away from the *hôpitaux*, whose

[162] T. Adams, *Beggars and Bureaucrats* provides the best-informed study of the phenomenon.

[163] The entries to the competition are summarized in abbé Malvaux, *Les Moyens de détruire la mendicité en France en rendant les mendiants utiles à l'État sans les rendre malheureux* (Châlons-sur-Marne, 1780).

[164] See e.g. abbé Récalde, *Traité sur les abus qui subsistent dans les hôpitaux du royaume et les moyens propres à les réformer, afin de rendre les maisons de charité des établissements utiles à l'humanité et glorieux pour la nation* (Paris, 1786).

[165] D. Diderot (ed.), *Encyclopédie, ou Dictionnaire des sciences, des arts et des métiers* (17 vols., Paris, 1751–65) vii. 72 ff., art. 'Fondation'.

very architecture took on an increasingly gothic, threatening profile: in his popular *Tableau de Paris* in the 1780s, for example, Louis-Sébastien Mercier shuddered before the horror of Bicêtre, the main house of the Paris Hôpital Général, 'terrible ulcer on the body politic, broad, deep, and full of pus'.[166]

The attack on the juridical instrument of the foundation merged into a more generalized attack on the ecclesiastical orientation of poor-relief institutions, which was held to prejudice considerations of social utility by overprioritizing the sacred. Hospitals were widely held to possess enormous wealth[167]—an estimate extremely wide of the mark—and a conspiracy theory developed in which the Church was reproached for failing to get the institutions to perform their social mission. The anticlerical attack was sometimes targeted on the religious communities which ran the hospitals. Though the communities modelled on Vincent de Paul's Daughters of Charity won wide praise—Voltaire, for example, was particularly commendatory—other orders drew flak. The staff–inmate ratio for the Daughters of Charity was something like 1 to 10, but in a group of *hôtels-dieu* in northern France run by quasi-contemplative orders, the number of sisters actually exceeded the number of beds available for the poor. The patrimony of the poor, it was claimed, was being diverted to keep up the tokenistic charitable commitment and comfortable lifestyle of religious communities.[168]

The image of dead babies—allegedly the hapless casualties of the deficencies of misguided poor-relief schemes grounded in an erroneous political economy and fuelled by religious selfishness—thus made a powerful impact on debates: Enlightenment France had already become far more sensitive to the emotional and protective demands of childhood.[169] It also chimed with what Thomas Laqueur has dubbed the 'humanitarian narrative' detectable in numerous Enlightenment texts: the 'aesthetic enterprise' by which 'a new cluster of narratives' (Laqueur cites autopsies, clinical reports, hospital descriptions, etc.) 'came to speak in extraordinarily detailed fashion about the pains and deaths of ordinary people in such a way as to make apparent the causal chains that might connect the actions of its readers with the sufferings of its subject'.[170] A bare

[166] *Tableau de Paris* (12 vols.; Amsterdam, 1782–8), viii. 1.

[167] Cf. ibid. iii. 229, evoking their 'immense wealth'.

[168] AN M672–80 and BN Joly de Fleury 1350. The figures for the quasi-contemplative orders are derived from the hospitals at Amiens, Abbeville, Mondidier, Saint-Riquier, Montreuil, Doullans, Saint-Valéry, and Corbie. For Voltaire's laudatory comments on nursing sisters, see his *Œuvres complètes* (52 vols., Paris, 1877–85) xii. 344.

[169] The classic source for the rise of sensitivity towards childhood is P. Ariès, *Centuries of Childhood* (Harmondsworth, 1962). For a useful updating and further elaboration, see R. Chartier (ed.), *A History of Private Life*, iii. *Passions of the Renaissance* (Cambridge, Mass., 1989), esp. 477 ff. The image of the dead baby was a powerful influence too on another medical debate of course: the attack on ignorant midwives and *matrones*. See below, pp. 737–9.

[170] 'Bodies, Details and the Humanitarian Narrative', in L. Hunt (ed.), *The New Cultural History* (Berkeley & Los Angeles, 1989), 176 f.

table of statistics on child-mortality could have a 'reality effect' which helped trigger an emotional response on the reader. There were forms of arithmetic, as Louis-Sébastien Mercier noted, 'which made men cry'.[171]

Mercier used this poignant wording in a discussion of what was, alongside excessive child mortality, the other key issue of debate in the questioning of the role of the hospital in the late Enlightenment, namely the fate of the great Parisian hospital, the Hôtel-Dieu. This great medieval foundation, which housed over 2,000 paupers was, noted the *Encyclopédie*, 'the largest, the most populous, the most wealthy, and the most terrifying of our hospitals'.[172] It was a fire in 1772, which gutted part of the institution, which made its rebuilding and reorganization something of a public issue in the last decades of the Ancien Régime, and put into glaring relief the appalling conditions to be found in the unreformed hospital. Overcrowding was endemic—a royal edict ordering a single bed for every hospital inmate in 1781 was laughably unimplemented—and the pell-mell mixture of different kinds of inmates led to high rates of cross-infection: about a quarter of inmates admitted to the institution died within it, often from diseases contracted within it. Prison reformer John Howard, who visited the hospital in the early 1780s, adjudged it the most unhygienic hospital he had ever visited while Parisian surgeon Jacques Tenon opined it 'built against the interest of the poor, of society, of its own interests, the rules of medicine, and at the same time against those of prudence'.[173]

By the last decades of the Ancien Régime, the Paris Hôtel-Dieu was the centrepiece of the 'black legend' of hospital mortality, morbidity, and social inutility. The article 'Hôtel-Dieu' in the *Encyclopédie* concentrated solely on the Parisian example rather than the hundreds of other *hôtels-dieu* throughout France, implicitly equating them with the appalling state of the Parisian institution.[174] Drawing on sources such as these, buttressed by the real-enough problems of overcrowding and mortality any major institution faced, historians have found this legend difficult to resist. They have even vied with each other to find a label atrocious enough to pin onto the eighteenth-century hospital: 'gateway to death', 'antechamber to the mortuary', 'dying places [*mouroirs*]', 'septic tanks'.[175] In so doing, they have swallowed the debating points of a choice Enlightenment polemic, and been misled by some clever rhetorical legerdemain.

[171] *Tableau de Paris*, x. 261. [172] viii. 319.

[173] Howard, *An Account of the Principal Lazarettos in Europe*, in id., *The State of the Prisons in England and Wales* (3rd edn., London, 1784); Jacques Tenon, *Mémoire sur les hôpitaux* (Paris, 1788), 149. For a good general account, see P. A. Richmond, 'The Hôtel-Dieu of Paris on the Eve of the French Revolution', *Journal of the History of Medicine and Allied Sciences*, 16 (1961), 335–53.

[174] *Encyclopédie*, viii. 319 ff.

[175] For a critical discussion of the 'Black Legend', see Jones and Sonenscher, 'Social Functions of the Hospital'. See too the sane and sensible remarks of Imbert, *Droit hospitalier*, 297 ff.; and Dinet-Lecomte, 'Recherches sur la clientèle hospitalière', 366.

The evidence we have so far adduced concerning the growing medicalization of the institution suggests that the black legend of hospital care needs substantial modification and nuancing. Although critics of the hospital invariably made, and make, the Paris Hôtel-Dieu exemplary of other such institutions, in fact it was an exception rather than a rule, a sore thumb rather than the tip of an iceberg. The argument about high mortality rates could hardly apply unmodified to *hôpitaux généraux*: here it was high since the individuals who entered them were either moribund—such as the aged—or else peculiarly vulnerable—the frail babies ignobly dumped at hospital gates suffered physiological and psychological trauma which wretchedly little could be done about. Paradoxically, in fact, most of the babies who died in hospital care did so not within the hospitals themselves, but in rural villages under the care of the impoverished wet-nurses who were the best *hôpitaux* could afford. The mortality rates of the Paris Hôtel-Dieu were, moreover, between two and three times higher than those in provincial *hôtels-dieu*: nine out of ten entrants into the latter walked out after treatment, one or less out of ten was carried out feet first (as opposed to one out of four in the Paris case). This, it should also be noted, marked a clear improvement on mortality rates in sixteenth- and seventeenth-century hospitals, where mortality rates of one in three were not unknown.[176] The fact, moreover, that the war ministry depended on civilian hospitals in the eighteenth century to provide adequate and effective health care for its soldiers confirms the relatively clean bill of health that most hospitals achieved in the last half-century or so of the Ancien Régime: death rates for sick soldiers were usually between 2 and 5 per cent only.[177] Civilian hospitals were 'gateways to death' for some; but for far more they were gateways back into society.

It would be foolish to present a rosy legend to replace the black. Yet it is important to descend below the rather disembodied level of Enlightenment polemical discourse, and to place the hospital debate in the context of what was actually going on within the institutions. The black legend does not address high levels of cure; it cannot explain improvement in mortality levels; and it fails to account for why many medical men continued to hold out hopes for the institution as a site for medical functions. The improving levels of hospital mortality over the eighteenth century attest to the relative efficacy of the increasingly medicalized hospital which nursing communities and trained medical practitioners, in their different and sometimes even contradictory ways, achieved—

[176] Jones and Sonenscher, 'Social Functions of the Hospital', 49 f. and *passim*. Cf. Dinet-Lecomte, 'Recherches sur la clientèle hospitalière', 366. For earlier mortality rates, see above, Ch. 4, Sect. C, plus N. Z. Davis, *Society and Culture in Early Modern France* (Stanford, Calif., 1975); M. Denieul, 'L'Hôpital Saint-Yves de Rennes', thesis, Univ. of Rennes, 1949; M. Le Mené, 'L'Hospitalisation à l'Hôtel-Dieu de Nantes 1571–1579', *Enquêtes et documents*, 4 (1978), 9–22.

[177] Cf. Jones and Sonenscher, 'Social Functions of the Hospital', 53.

not least through a tougher exclusionary policy towards contagious cases. The relative success of their efforts arguably highlighted problems within hospitals which were becoming particularly acute as the century wore on. Medicalization cost money: to maintain high nurse–inmate ratios, to pay for salaried medical staff, to achieve a good and balanced inmate diet, to fund drug provision, and to allow hygienic standards to be maintained and improved upon. Unfortunately, most eighteenth-century hospitals were increasingly short of funds.

If the hospital was in crisis in the eighteenth century, that crisis was financial before it was moral and emotional. The institutions were not short of devoted and dedicated individuals working within them: but they were strapped, desperately, for cash. The financial problems of hospitals related to social problems they could do little to control. The patterns of urbanization, price inflation, and land fragmentation considerably enlarged, as we saw in Chapter 6, the dimensions of the related problems of poverty and public health. Demographic change—the passage from mortality crisis to spasmodic bouts of hunger—meant that chronic illness was more of a problem, and that the aged and infirm survived in greater numbers to place a growing burden on the poor-relief institutions. The rise of illegitimacy and child abandonment meant that the number of children passing under hospital care mushroomed. Attitudinal changes, too, associated with the advances of religious indifference reduced the rate at which testamentary and other forms of charity nourished hospital endowments. The *fondation* was a broken reed, well before Turgot had assailed it in the pages of the *Encyclopédie*.[178]

The financial crisis of hospitals in the last half-century or so of the Ancien Régime was, however, about more than the impact of social pressures and seismic shifts in *mentalités*: it was also about the deficiencies of government policy. The impact of government policy in the 1720s and 1730s made most hospitals poorly prepared for the demands to be made of them later in the century. The fiscal chaos flowing from the financial system of John Law caused a great many hospitals the loss of a major part of their investments: the big Hôtel-Dieu at Metz lost half of its income, the hospital in Grenoble 10 per cent, and that at Limoges in excess of 60,000 *livres*.[179] Anti-vagrancy legislation in the 1720s also played a part. The government endeavoured to construct a flexible network of *hôpitaux généraux* throughout France from 1724 to take in and discipline the

[178] For an overview of social tensions in 18th-cent. society, see P. Goubert, *L'Ancien Régime*, ii. *Les Pouvoirs* (Paris, 1973); Hufton, *Poor of Eighteenth-Century France*; J. Y. Grenier *et al.*, 'Croissance et déstabilisation', in Dupâquier (ed.), *Histoire de la population française*, ii.; and above, Ch. 6, Sects. A and B.

[179] AD Moselle, Archives hospitalières de Metz F1 & H4673; AD Isère, Archives hospitalières de Grenoble B140, B156, A2; and AD Haute-Vienne, H Supplément, Hôpitaux de Limoges E2. For losses following John Law in hospitals in Bas Languedoc, see AD Hérault C561 (Agde, Florensac, Gignac, Pézenas, etc.).

thousands of beggars and vagrants the rural police force (*maréchaussée*) was primed to arrest. It encouraged the merger of small rural hospitals into major *hôpitaux*, set the latter high capacity levels, and promised high funding levels to match. Yet the campaign soon ran into the sand. Hospitals found it increasingly difficult to obtain full reimbursement from the government for their activities in the late 1720s, and from 1734 the central government formally withdrew all funding from the anti-vagrancy programme.[180]

The result of the government playing fast and loose with hospitals in the 1720s and 1730s was that hospitals often grew drastically in size, albeit with insufficient funds to cover the increased scale of their operations just as broader social problems were coming into play. The hospital at Bayonne, for example, had only had 12 inmates in the late seventeenth century; the government encouraged it to expand its capacity to 40 in 1724; but by the 1730s it had 140 inmates plus 240 foundlings out with wet-nurses. This was fairly typical. The major hospitals in the Auvergne saw their inmate populations tripling in a single decade. The capacity of the hospital at Mende grew from 70 in 1700 to 200 in the late 1720s. The process continued, especially in the aftermath of the economic and demographic crisis of 1739–42. From less than 150 inmates in the early 1720s, the Limoges hospital grew to 300 to 400 in the 1730s, and by the 1750s had reached a level of 800 to 900 inmates, with 1,000 foundlings with wet-nurses in the countryside. The Hôpital Général at Toulouse hovered at 500 to 600 inmates up to the 1730s, but by mid-century had grown to nearly 2,500. The Montpellier Hôpital Général had 300-odd inmates in the 1700s, between 500 and 650 in the 1730s and 1740s, and up to 750 by the early 1760s.[181] The advance was just as spectacular in the case of middling hospitals: the capacity of the hospital at Honfleur grew from 98 in 1746 to 169 in 1789; that of Orbec from about 12 in the late seventeenth century to 54 in 1741, and then 80 by 1787; that at Chateaudun from 230 before 1720 to 370 on the eve of the Revolution.[182]

The financial problems of hospitals developed apace, so that individuals shrank from being nominated as administrator, and possibly having to put their own fortune at risk: one individual in Pau went to prison so as to avoid being hospital treasurer and refused repeated offers to be bailed out so as to take up the

[180] Cf. above, Sect. B.

[181] AD Pyrénées-Atlantiques, Archives hospitalières de Bayonne E17–21; AD Puy-de-Dôme C1048, C1055, C1068, C1077; L. Costecalde, 'Notice sur l'Hôpital de la ville de Mende et l'œuvre de la Miséricorde', *Archives gévaudannaises*, 2 (1909–14), 333–78; A. Giost, 'Histoire de l'Hôpital Général de Limoges', MS at AD Haute-Vienne HSup (Limoges) E112–13; Buchalet, *Assistance publique*; Jones, *Charity and 'Bienfaisance'*, 62, 262.

[182] A. Bénet, *Inventaire sommaire des archives départementales antérieures à 1790, Calvados, Archives ecclésiastiques, Série H Supplément*, ii. *Hôpitaux de Honfleur, Orbec et Bois-Halbout* (Caen, 1900), 143 ff., and 56, 80; A. de Belfort, *Archives de la Maison-Dieu de Chateaudun* (Chateaudun, 1881), xxxvi.

office. At Mauriac in the 1760s, it was reported that nominating someone hospital treasurer was an accepted way of attacking one's enemies.[183] By then, a good number of major *hôpitaux généraux* were staring bankruptcy in the face. It was only by allowing the province to impose new taxes earmarked for hospitals that the government was able to keep the major *hôpitaux généraux* of the Auvergne (Riom, Clermont, and Issoire) afloat. Government subventions helped circumvent disaster in major urban institutions in Languedoc, Provence, the Auvergne, and elsewhere, while royal grants of a share of municipal tolls (*octrois*) developed into one of the firmest props of institutional solvency in this age of urban consumerism.[184]

Government aid though spasmodically effective, was, however, simply too paltry to provide an adequate solution to the financial crisis of the hospital network as a whole. Moreover, the introduction of *dépôts de mendicité* diverted much of the government cash available into non-hospital institutions. Other government measures worsened the hospitals' plight. The law of 1749 on mortmain, which was aimed to restrict the giving of testamentary charity to institutions bearing royal letters patent, had the effect of staunching the flow of private charity into many hospital coffers: a governmental enquiry into hospital finances in 1764 revealed this as a very serious problem, and despite government attempts to regularize the situation, levels of charity, already feeling the effect of growing religious indifference, rarely recovered their erstwhile buoyancy. It is true that the acquisition of royal letters patent allowed a hospital to bypass the 1749 provisions: yet this was a procedure, as the administrators of the little hospital at Saint-Yrieix in the Limousin noted, which required 'a great deal of credit, protection, movements, and expenditure'.[185]

In the past, many hospitals had made economies by bringing in 'charitable professionals' like the Daughters of Charity to run their affairs for them: but this too was becoming an increasingly costly option, out of the grasp of a great many institutions.[186] An edict introduced in 1780 encouraging hospitals to shift their investments from land into government stock also had a deleterious effect on the patrimony of many hospitals.[187] Even government legislation which aimed to help had counterproductive effects. An edict in 1779, for example,

[183] AD Pyrénées-Atlantiques, Archives hospitalières de Pau E52; AD Puy-de-Dôme C969.

[184] Buchalet, *Assistance publique*, 74 ff.; G. Valran, *Misère et charité en Provence au* XVIII*e siècle: Essai d'histoire sociale* (Paris, 1899), 210 ff.; Lallemand, *Histoire de la charité*, 376; Bellande, *Ancien Hôpital Général d'Issoire*, 118. Cf. also C. Bloch, *Assistance et l'état*, 301 (Reims).

[185] AD Haute-Vienne, HSup (Saint-Yrieix) H1. For the 1749 edict, see C. Bloch, *Assistance et l'état*, 305 ff. For the 1764 enquiry, see AN M672–80.

[186] The archives of the community at AN S6160–80 reveal wage rises doubling over the last century of the Ancien Régime, and establishment costs rose too: travel for a small community to the south of France cost around 1,000 *livres*.

[187] C. Bloch, *Assistance et l'état*, 310 ff.

promised funding for major hospitals receiving foundlings and also aimed to stop some of the literally murderous excesses of 'baby-farming': the carriage of foundlings from neighbouring (and remote) provinces into Paris, and their unceremonious dumping on the Enfants-Trouvés. But the same law also obliged a great many hospitals which had rarely or never before accepted foundlings into suddenly having to find ways and means of coping with a local flood of such frail charges. The load on the Paris Enfants-Trouvés was slightly relaxed; but the hospital at Metz, for example, was almost literally overrun.[188]

This substantial growth of demand for health and hospital care, against a background of financial inadequacy, caused strains with which hospital administrators, nursing sisters, and medical practitioners found almost impossible to cope. Many hospitals reacted by deliberately taking steps to reduce their intake of inmates. The Metz hospital temporarily stopped all admissions, save foundlings. Hospital capacity actually went down at the height of the crisis as at Metz, Montpellier, and Toulouse, for example.[189] *Hôtels-dieu* speeded up turnover in order to cope with added demand. Minor institutions shifted more of their income into home relief for local paupers, reserving institutional care for severe cases, the homeless, and soldiers (for the last of whom it received government reimbursement).[190] Despite such steps, levels of patient care probably deteriorated in the last couple of decades of the Ancien Régime in many institutions. Damage done to variety in what was anyway a rather unbalanced hospital diet lacking in Vitamin C and other essential nutrients probably had a disproportionate impact on the biological viability of babies and children, those sympathetic targets of Enlightenment *bienfaisance*.[191]

F. The Hospital: Medical Aid or Health Hazard?

The severe financial crisis of the hospital in the last years of the Ancien Régime fuelled a rhetorically strident hospital critique. The latter placed question marks against the putative medical role which the institutions had been developing over the course of the Enlightenment in medical training and research, and against the glowing future being assigned them by medical

[188] AD Moselle, Archives hospitalières de Metz G2.

[189] Ibid.; Jones, *Charity and 'Bienfaisance'*, 262; Buchalet, *Assistance publique*, 74 ff.

[190] For these strategies in action, see Jones, *Charity and 'Bienfaisance'*, 67 ff.; and cf. above, Sects. B, D.

[191] Evidence abounds along these lines; but there is good and careful discussion of the point in M. J. Villemon, 'A partir des sources hospitalières: L'Alimentation des pauvres de l'Hôpital Général de Caen au XVIIIe siècle', *Annales de Normandie*, 21 (1974), 235–60; and Y. Pottier, 'La Population de l'Hôpital Saint-Yves de Rennes dans la première moitié du XVIIIe siècle (1710–1750)', Mémoire de maîtrise, Univ. of Rennes, 1974. Cf. hospitals inspector Colombier on diet in the Haguenau hospital, cited in Lallemand, *Histoire de la charité*, iii. 537.

reformers like Vicq d'Azyr. Some hospital critics—especially, seemingly, those influenced by physiocratic thinking—came to take up the extreme position of wanting the closure of all hospitals on medical grounds. The economist Dupont de Nemours argued that no illness found in a hospital was ever pure: it was invariably overlaid by cross-infection and the adventitious effects of poor hygiene. The philanthropic empiric Claude Humbert Piarron de Chamousset (1717–73) held that any hospital with over a hundred inmates was 'a public plague' and Montpellier graduate Joseph-Marie Audin-Rouvière (1764–1832) and other 'medical topographers' viewed hospitals located centrally within cities as a source of infection throughout the poorer neighbourhoods. The Marseilles physician Raymond even itemized a number of illnesses (gangrenous sore throat, virulent tumours, some forms of scurvy, etc.) which he claimed one simply never found outside hospital walls; while surgeon Jacques Tenon represented the childbirth beds at the Paris Hôtel-Dieu like a foul chemical retort, bubbling over with noxious miasmas and producing a quite distinctively deadly local version of puerperal fever.[192]

Other critics concentrated their fire on the big institutions, and held out hopes of redemption for smaller hospitals, especially those in which an efficient medical service could be properly organized and in which the pathology of the site was carefully scrutinized. This scenario, which seemed to offer the chance of both more scientific medicine and better care, chimed with current values of a broader *bienfaisance*. Hospitals did not have to be destroyed; they could be reformed. The view was concretized, moreover, in the creation of a number of small hospitals in Paris. In 1755, a Hospital of the Gardes-Françaises had been established, and this became an important centre for the treatment of venereal disease among soldiers and experimentation with new drugs; while in 1780 the government had encouraged Paris *lieutenant-général de police* Lenoir to create the Vaugirard Hospital, for venereally diseased mothers and babies.[193]

These hospitals, along with the hospice for clinical cases founded in 1774 by the Academy of Surgery,[194] contrasted strikingly and in every way with the massive, sprawling, and noxious ambiance of the Paris Hôtel-Dieu. They high-

[192] [Dupont de Nemours], *Idées sur les secours à donner aux pauvres malades dans une grande ville* (Philadelphia, 1786), 25; Audin-Rouvière, *Essai sur la topographie physique et médicale de Paris* (Paris, Year II [= 1794]); Foucault, *Folie*, 433 ff. Cf. L. S. Greenbaum, 'Health-Care and Hospital-Building in Eighteenth-Century France: Reform Proposals of Du Pont de Nemours and Condorcet', *Studies on Voltaire and the Eighteenth Century*, 152 (1976), 895–930. See too Raymond, 'Sur la Topographie médicale de Marseille et de son territoire', *Histoire de la Société Royale de Médecine. Années 1777 et 1778* (Paris, 1780), 123; Tenon, *Mémoires sur les hôpitaux*, p. xxviii.

[193] On these small institutions, see D. B. Weiner, *The Citizen-Patient in Revolutionary and Imperial France* (Baltimore, 1993). Cf. Bénabou, *La Prostitution et la police des mœurs aux XVIIIe siècle* (Paris, 1987), 419; and, for the venereal disease case, AD Hérault C554.

[194] See above, Ch. 9, Sect. C.

lighted a new commitment to small hospitals on the part of government, influenced by a physiocratic version of political economy, a fashionable concern for *bienfaisance*, and a sense of the potential of such institutions for purposes of medical science. The trend was particularly marked under the ministry of the Swiss banker Jacques Necker between 1777 and 1781. Necker's wife was instrumental in the establishment in 1778 of a small hospital in the parish of Saint-Sulpice: the Hôpital Necker, as it came to be called. The government circulated hundreds of copies of the constitution and accounts of Madame Necker's hospital to offer a form of best-practice exemplification which, it was hoped, would stimulate similar efforts. At least one provincial offshoot was spawned, the Protestant hospital at Montpellier in 1785, which had an especially elaborate and sophisticated panoply of medical care laid on within it.[195] Further micro-hospitals emphasizing high inmate turnover and low cost on the Necker model were subsequently created in Paris too, in the parishes of Saint-Jean-du-Haut-Pas in 1780 by the *curé* Cochin; of Saint-Merry by *curé* Viennet in 1783; and in the Roule parish by the financier Beaujon in 1785.[196] At one end of this new spectrum of micro-institutional care were the abbé de l'Epée's institute for deaf-mutes and Valentin Haüy's institute for blind children, as well as the plethora of medical institutions for health purposes, which answered to a growing demand for institutional care—private madhouses, inoculation centres, old people's homes, and so on—which medical entrepreneurs were doing their best to create.[197] Similarly, the decision to move from military hospital to the regimental infirmary within the armed forces in 1788, was also influenced less by a desire to dehospitalize society altogether than to reduce the scale and attenuate the pathology of the traditional hospital and to nurture the institution's medical and philanthropic role.[198]

If the hospital was to lose its reputation as a health hazard and develop a strongly medical role, then small was beautiful. The institution was viewed as only redeemable as a *machine à guérir* if it were scaled down in size and observed stringently subjected to a medicine of the site. Nowhere is the conviction that medical science could prosper in a reformed hospital more clearly evinced than in plans to rebuild the Paris Hôtel-Dieu following the fire of 1772. Right down to the Revolution, a host of writings poured forth offering plans for more rational and more health-giving health care, and it resulted in the recommendation

[195] An ex. of the Mme Necker document, entitled *Hospice de Charité* (62 pp.), is located in AD Finistère, Archives hospitalières de Morlaix 47H17. For the Protestant hospital, Archives du Consistoire de Montpellier, Montpellier (unclassified archives of the hospital); and Jones, *Charity and 'Bienfaisance'*, 90 f.

[196] C. Bloch, *Assistance et l'état*, 347 f.; Weiner, *Citizen-Patient*, 38 ff.

[197] Weiner, *Citizen-Patient*, 226 ff.; cf. above, Ch. 10, Sects. C and D.

[198] See above, p. 699. For the 'dehospitalization' movement, see too Foucault, *Birth of the Clinic*, 17 ff.

that the large old institution should be replaced with four newer ones on the lines of the micro-hospital.[199] In some ways the high-water mark of the campaign was the publication in 1788 of Jacques Tenon's *Mémoire sur les hôpitaux de Paris*, which offered the most heavily documented and thoroughly researched of all the writings centred on the problem of the Hôtel-Dieu.[200] It was based on extensive field research, in English as well as French hospitals, coupled with wide reading in medicine and the ancillary sciences of hygiene, demography, chemistry, physics, and biology, and a thorough grounding in architectural theory. Tenon's 'empirical-analytical approach'[201] exuded Enlightenment optimism even as he painted a black and ghastly portrait of existing institutions. To be a 'health factory', as France's state of civilization seemed to require, rooms were needed which were properly ventilated, lit, and furnished, and from which stench of disease had been banished, and a rationally medical service should be supplied in all domains of the hospital's activity. 'Service, salubrity, tranquillity, safety' were Tenon's watchwords; extreme attention to detail, his trademark. 'He knew by inches and lines', Georges Cuvier later reminisced, 'the air a man needed to breathe, the space he needed to sleep, and to be buried ... We never saw him appear at the funeral of our colleagues without measuring the grave to determine if it complied to regulations.'[202] Science was being placed at the service of humanity's future, and that future had no place for hospitals as they had existed in the eighteenth century.

Even if we remain properly cautious about accepting the black legend of the pre-modern hospital at face value, there is no denying its force as a social myth in shaping attitudes and policies regarding the place of hospitals in society in the late Enlightenment. The prevalence and influence of that myth was fuelled, we have argued, as much by growing sensitivity to broad health issues as by an aggregate growth in misery and insanitary conditions. The hospital had become a battlefield on which a number of choice disputes were, by the close of the Ancien Régime, being fought out. Some of the bones of contention—such as lay criticism of overbearing religious influence, or physiocratic disputes over the economic potential of *hôpitaux généraux*—related only tangentially to health concerns. Others, however, lay close to the heart of tensions within the medical

[199] The writings of L. S. Greenbaum are esp. helpful here: see notably 'Health-Care and Hospital Building'; 'Nurses and Doctors in Conflict'; 'Jean-Sylvain Bailly, the Baron de Breteuil and the "Four New Hospitals" of Paris', *Clio Medica*, 8 (1973), 261–84; and 'Tempest in the Academy: Jean-Baptiste Le Roy, the Paris Academy of Sciences and the Project of a New Hôtel-Dieu', *Archives internationales d'histoire des sciences*, 24 (1974), 122–40.

[200] On Tenon, see id., ' "Measure of Civilization": The Hospital Thought of Jacques Tenon on the Eve of the French Revolution', *Bulletin of the History of Medicine*, 49 (1975), 43–56; and id., ' "The Commercial Treaty of Humanity": La Tournée des hôpitaux anglais par Jacques Tenon en 1787', *Revue d'histoire des sciences*, 24 (1971), 317–50.

[201] Id., 'Measure of Civilization', 46. [202] Ibid. 48.

world. In particular, they problematized the institution in its existing form as a suitable environment for medical training and clinical testing. How could such an apparently anachronistic institution, which in some accounts was clearly pathogenic, be an appropriate site either for scientific testing or for medical teaching and research? If the institution were to be refashioned for a medical-scientific vocation, it would need to be reformed from top to bottom. The diminishing stock of most existing hospitals as social institutions able to combat poverty and contain—let alone cure—disease meant, moreover, that the state increasingly looked to other channels of social and medical action in the last decades of the Ancien Régime. As we shall see in Chapter 12, the state had never limited its involvement in health care to promoting the incarceration of paupers, but from the 1760s its commitment to the development of alternative strategies became particularly noticeable.

12

Medicine and the Enlightenment State

A. The 'Boîtes d'Helvétius' (boîtes des remèdes)

The longest-established example of direct governmental involvement in health care was the sending of boxes of remedies into the provinces for popular illnesses and epidemics. The practice had emerged, as we have seen, as an ancillary feature of the 'Great Confinement' of the poor.[1] The institutionalization of many categories of poor and needy in *hôpitaux généraux* was buttressed by a number of other mercantilistic measures—for example restriction of emigration, incentives for large families, limits on monastic communities, hospital reforms—aimed at increasing the size and augmenting the health of France's population. The campaign to establish *hôpitaux généraux* was often accompanied by a move to generalize charity boards (*bureaux de charité*), presided over by parish priests and funded by voluntary almsgiving, in those parishes which lacked formal hospital provision or other types of charitable income.[2] In the 1680s, 'having learnt that contagious diseases were causing the death of large numbers of his subjects in villages far distant from the ordinary succour of medicine', Louis XIV threw his support behind regular transmission of drugs into the provinces, especially in times of dearth and mass disease.[3] One of the royal physicians, Jean-Baptiste Chomel, was entrusted with the preparation of these remedies, which were distributed through intendants, bishops, hospital directors, seigneurs, local notables, and charity boards. There was also an emphasis on the utility of manuals of remedies such as the compilation of Madame Fouquet, which 'diminish by more than one-third the number of the poor and sick, and the expenditure of hospitals and charitable confraternities', for, it was confidently asserted, 'whosoever can read becomes a physician from the first day'.[4]

In 1688, at the instances of councillor of state Henri d'Aguesseau, the service was placed under the jurisdiction of the controller-general, the state's chief financial officer, and then expanded under the stewardship of Jean-Adrien

[1] See above, Ch. 11, Sect. B.

[2] C. W. Cole, *Colbert and a Century of French Mercantilism* (2 vols.; New York, 1939), ii. 463 ff. For *bureaux de charité*, see e.g. C. Joret, 'Le Père Guevarre et les bureaux de charité au XVIIe siècle', *Annales du Midi* (1889), 340–93.

[3] BN MS Fr 6801, fo. 327.

[4] *Hospitaux Généraux* (n.p., 1677). See too BN MS Frs 21804 and 6801.

Helvétius, the Dutch physician whose popularization of ipecacuanha, as we have seen, had made his reputation at court and won him an influential place in the state administrative hierarchy.[5] Helvétius was a past master at reaching a wide audience by bypassing the ranks of conventional medical practitioners. He used his court position to expand and consolidate his market position, also developing a sizeable audience for his works of medical popularization which preached the virtues of (naturally enough) his own remedies—notably his *Recueil des méthodes de M. Helvétius*, which was little more than a collection of advertising leaflets for his largely purgative concoctions.[6] By targeting the poor in areas relatively devoid of trained medical personnel, Helvétius could make his remedies appear an altruistic gesture of dynastic benevolence. This justified his use, as dispensing agents, of local charitable figures, both lay (seigneurs in particular) and ecclesiastical. In the early 1720s controller-general Dodun tried to concentrate the diffusion of the *Remèdes d'Helvétius*, as they had come to be called, through the Daughters of Charity, 'by their institute, more devoted to provide succour to the sick poor than any other persons'.[7] This initiative coincided, however, with a time when that order was having difficulties in recruiting, and the service was thereafter distributed more widely through similar orders and the parish clergy—sometimes direct, sometimes via seigneurs, sometimes via intendants.[8] In the 1720s Helvétius was contracted to manufacture 100,000 doses (*prises*) a year, a figure that was raised to 126,910 doses in 1734. By then, his son Jean-Claude-Adrien (1685–1755) had taken over the family firm. The latter spent a good deal of his amassed wealth in securing for his own son (the future *philosophe*) the venal office of farmer-general, and on his death in 1755 the production of the drugs was bequeathed to a cousin, the little-known court physician Jean de Diest. In 1762 the firm passed into the hands of Joseph-Marie-François de Lassone.

By the end of the Ancien Régime, Lassone had gone down in history as the first man since Fernel to hold the post of premier physician to both the king and the queen.[9] He had climbed to the top of this greasy pole through consummate

[5] See above, Ch. 10, Sect. A; L. Lafond, *La Dynastie des Helvétius: Les Remèdes du Roi* (Paris, 1926); and, for an overview, C. Bloch, *L'Assistance et l'état en France à la veille de la Révolution* (Paris, 1908). Cf. Jean Verdier, *La Jurisprudence de la médecine en France* (2 vols.; Alençon, 1762–3), i. 149 ff.

[6] Helvétius's *Traité des maladies* was also much republished and translated over the century.

[7] AD Hérault C529. L. Le Grand, 'Remèdes fournis gratuitement dans les généralités par les soins des Intendants au XVIIIe siècle', *France médicale*, 57 (1910), is good on the early decades of the century.

[8] For recruitment problems of the Daughters of Charity, see AN L1054, L1665; and C. Jones, *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989), 171 ff.

[9] For Lassone, see C. Jones, 'The *Médecins du Roi* at the End of the *Ancien Régime* and in the French Revolution', in V. Nutton (ed.), *Medicine at the Courts of Europe, 1500–1837* (London, 1990), *passim*.

skills as a courtier within the royal medical household. Son of a royal physician himself, his first court post was as physician to Louis XV's queen, Marie Leczinska, in 1751. It was to be in the 1770s that he consolidated his position, by securing the affection of Louis XVI—and presumably the gratitude of the latter's wife Marie-Antoinette—by helping to treat the future king's phimosis which was rendering him impotent and nullifying his marriage.[10] As from 1774 first physician-in-reversion to Louis XVI, he wielded more power than premier physician Joseph Lieutaud (1703–80), whom he succeeded on the latter's death in 1780.

Under the control of this still budding master-medical politician, the service of the *remèdes du Roi*—the *Helvétius* label passed into obscurity—was enormously expanded and streamlined. Lassone was able to tap into the revitalization of the ideological bases of dynastic benevolence which was taking place from the 1760s onwards, utilizing this as a means of consolidating his power and ensuring his personal enrichment. In 1768 the controller-general's office increased the number of doses between sevenfold and eightfold to 932,136 *prises* per annum, in 742 small and 32 big boxes prepared by Lassone. In 1776 the number of *boîtes des remèdes* was increased from 774 to 2,258. The intendant of Burgundy had distributed 12 of these medicine chests in the 1720s but by the 1780s had 84 in his gift, most of which went to parish priests (57 per cent) and seigneurs (20 per cent). Whereas there had been a drift towards channelling the drugs to medical men, hospitals, and charitable persons in the major towns, the emphasis now was on targeting medically underequipped rural areas, giving the service a fashionably physiocratic tinge.[11]

By the last years of the Ancien Régime, the much-expanded service had become a cottage industry for the Lassone family. Lassone brought his son Jean-François into partnership, after rushing him through the Montpellier Medical Faculty (the university's chancellor, Barthez, was whispered to have ghosted his dissertation), and he also selected a young apothecary with a background in chemistry, Claude-Melchior Cornette (1744–94), as his assistant in a laboratory which he established in Versailles, where they experimented on new products using up-to-date chemical techniques.[12] Lassone sponsored Cornette too

[10] The most reliable recent accounts of the impotence problem seem to discount the role of Lassone: D. Beales, *Joseph II*, i. *In the Shadow of Maria Theresa, 1741–1780* (Cambridge, 1987), 374 f. and nn.; and A. de Baecque, *Le Corps de l'histoire: Métaphores et politique (1770–1800)* (Paris, 1993), 57 ff.

[11] Lafond, *Dynastie des Helvétius*, 190 ff.; C. Lamarre-Tainturier, 'Les Secours aux malades pauvres des campagnes dans la généralité de Bourgogne au XVIIIe siècle', *97e Congrès National des Sociétés Savantes (Nantes, 1972)* (Paris, 1977), 506. For developments prior to the 1760s, see AD Hérault C529, C530 and AD Aisne C669.

[12] Esp. helpful on these developments is A. Desormonts, *Contribution à l'étude du XVIIIe siècle médical: Claude-Melchior Cornette* (Paris, 1933). For the role of Barthez, see *Gazette de santé*, 13 Feb. 1777.

through the medical course at Montpellier, where the chemical applications of medicine were being pioneered: alumnus Jean-Antoine-Claude Chaptal, for example, Napoleon's future interior minister, was in 1780 appointed endowed lecturer in chemistry for the Estates of Languedoc and he developed industrial uses of chemistry on the banks of the River Mosson just outside the city.[13] On Cornette's return to Versailles, Lassone secured him a position worth 3,000 *livres* a year as physician to the king's aunts. Cornette supplemented his work on the *remèdes du Roi* in other ways too, experimenting on making the latrines at Versailles less smelly, fumigating hospital wards, and dabbling in venereology and dermatology.[14]

By the 1780s the Lassone enterprise was in the enviable position of being both monopoly producer and supplier of the drugs in a sizeable, but cosily protected, market. The potential for some pretty hefty profits were in place. We lack account-books. Lassone's enemies, however, were in no doubt on this score: 'to be inspector of these medicines', sneered a pamphleteer, 'to be their manufacturer, as well as a merchant and salesman in them, is to be simultaneously Harlequin thief, police agent, and magistrate'.[15] It was claimed that Lassone received 55,000 *livres* a year from the central government for supplying the drugs—three times more than he had been paid in the 1760s—but spent only 18,000 *livres* on the actual production. The walls of Cornette's dwelling were hung with Rembrandts, Philippe de Champaignes, and Leonardo da Vincis.[16]

It seems altogether likely that as astute an operator as Lassone was indeed profiting from his position—but it seems improbable that he thought he was doing anything wrong. On the contrary, his concern for production processes evinced a touching belief in scientific certitudes, social utility, and economic rationality. His enemies represented him as a master quack, but his commitment to the transparency of scientific knowledge seemed to contravert that assumption. He was a long-established member of the Academy of Sciences, for example, and had published numerous reports in its papers. He encouraged his associate Cornette to publish his findings too, after reading them in audiences before the Academy (whose *adjoint* he became in 1778). There was to be nothing of the *remède secret* of the charlatan in their activities.

Lassone would also have regarded utilizing his captive market to develop the efficacy and quality of his product as nothing if not enlightened. Local agents

[13] M. Péronnet (ed.), *Chaptal* (Toulouse, 1988).

[14] AN O1 1784 (for salary); Desormonts, *Cornette*, 84, 111, etc.

[15] *Observations impartiales sur la Commission royale de Médecine* (n.p., n.d.).

[16] For the accusations, see *Lettre du Signor Miraculoso Fiorentini* (n.p., n.d.), 7 f. Théophile de Bordeu claimed in 1766 that Lassone was receiving 20,000 *livres* for the *boîtes des remèdes* service: Bordeu, *Correspondance*, ed. M. Fletcher (4 vols.; Pau, 1973), iii. 27. For Cornette, see Desormonts, *Contribution*, 42 (based on his post-mortem inventory, 1794).

were primed to target the drugs more carefully where it was thought they could be most effective. Thus in Bas-Languedoc, for example, the intendant ensured that the malarial villages of the littoral received the lion's share of the boxes, which were usually entrusted, as elsewhere, to the local parish priest. The growing insistence that those in charge of administering the medicines report back through the subdelegates and intendants on the effects of different medicines meant that Lassone was able to utilize the structures of the absolutist state as an experimental quality control mechanism and product testing service.[17] State involvement, science, profit, philanthropy, and public health seemed to be moving into innovative and intriguing new configurations, with the *premier médecin du Roi* at the helm.

B. Bienfaisance *and Medical Police*

There were still many individuals in eighteenth-century France who held on to the so-called 'constitutional thesis': the claims of the king were perceived as being restrained by the legitimate rights of property and the fundamental laws of the kingdom, and society was configured as comprising a great chain of being at the head of which was situated the monarch.[18] Yet in the ethos of enlightened *bienfaisance*, or beneficence, whose offshoots we have witnessed in the debates over the hospital in the last years of the Ancien Régime, there was a growing tendency to view the monarch's generous concern for his subjects as somehow transcending any vestiges of contractual theory. Absolutist ideology of this stripe made no qualitative distinction between the welfare of the state and the welfare of society: the two were frequently viewed as conterminous. The king's good-heartedness did not brook potential nay-sayers.[19]

A distinctive feature of this late Enlightenment mixture of *bienfaisance* and absolutism was the development of a body of administrative theory and practice centred on the idea of *police*. The latter term extended far beyond the maintenance of public order to evoke the primordial role of the central government in nurturing and developing the life of the community as a whole. It originally denoted the kind of self-regulation in which all corporative bodies within the Ancien Régime polity engaged, but from the late seventeenth century had developed in addition a more specific designation as regards administrative offi-

[17] AD Hérault C529–30, for this report-back service. In Brittany too coastal regions hogged the boxes: J. P. Goubert, *Malades et médecins en Bretagne, 1770–1790* (Paris, 1974), 438.

[18] See above, Ch. 4, Sect. B; Ch. 10, Sect. C.

[19] For state *bienfaisance*, cf. C. Bloch, *Assistance et l'état*, *passim*; and C. Duprat, *Pour l'amour de l'humanité: Le Temps des philanthropes* (2 vols.; Paris, 1994 and forthcoming), i. 42 ff. Like many other studies of late Enlightenment *bienfaisance*, Duprat's work underplays the political stakes involving the role of the state.

cials responsible to the monarch. The most significant of the latter was the *lieutenant général de police* established in Paris in 1667 as the draconian scourge of beggars and crooks. Though *police* denoted state repression, it was also conceived of as an enabling, even enlightening, force. A particular concern was the provision of staple foodstuffs to the subjects of a monarch whose propagandists portrayed him as a *père-nourricier*, duty-bound to nourish his societal family.[20] The forces of police made this possible, and added in other ways to the regulation of ordered life. By the end of the Ancien Régime, for example, the Paris *lieutenant général* had acquired extensive non-repressive functions. The powerful Lenoir, in post from 1776 to 1785, had a large criminal police force, an army of informers and spies, a host of censors, and the organizing cadres of the city's vice trade at his beck and call, yet he also had a more proactive role in much of the business of urban living: matters of subsistence, artisanal production, and market regulation were under his control, as was a whole range of matters including street clearance, lighting and fire services, and public works. Roughly a quarter of the agency's personnel and one-fifth of its budget were devoted to these services.[21]

The communal welfare which the forces of police were entrusted with nourishing within society included questions of security and health. 'Public health', noted the physician-*Encyclopédiste* Jean-Joseph Menuret de Chambaud (1739–1815), 'is the vigour, the strength, the wealth and the prosperity of a state.'[22] As a text such as Nicolas de La Mare's *Traité de police* showed, absolutist state formation and societal felicity could both be achieved through the administration of rational and beneficent state regulation. The theory was further buttressed by cameralist ideas developing in Germany. In the field of health care, the term 'medical police' was first used in 1764 by a German cameralist writer, and the term and concept were familiarized through the writings of Austrian theorist Johann-Peter Frank, the first volume of whose *System einer vollständigen medicinischen Polizey* appeared in 1779, and constituted a particularly strong and cogent expression of the cameralist mixture of mercantilism and absolutism

[20] There is a particularly good discussion of the term *police*, with an emphasis on the question of food-supply, in S. L. Kaplan, *Bread, Politics and Political Economy in the Reign of Louis XV* (2 vols.; The Hague, 1976), i. 6 ff. Essential background is present in Nicolas de La Mare, *Traité de police* (Paris, 1722).

[21] A. J. Williams, *The Police of Paris, 1718–1789* (Baton Rouge, La., 1979), 385 f., for the statistics. For censorship, see D. Roche, 'Censorship and the Publishing Industry', in id. and R. Darnton (eds.), *Revolution in Print: The Press in France 1770–1800* (Berkeley & Los Angeles, 1989), 3 ff.; and for the prostitution trade, see E. M. Bénabou, *La Prostitution et la police des mœurs au XVIIIe siècle* (Paris, 1987).

[22] Cited in J. C. Riley, *The Eighteenth-Century Campaign to Avoid Disease* (London, 1987), 31. The quotation comes from Menuret's *Essai sur la ville de Hambourg*, pub. posthumously in 1797.

and outlined methods of ensuring public health through rational and enlightened state action.[23]

Cameralist thinking, which was much in vogue following the future Louis XVI's Austrian marriage, influenced the physiocrats, who represented that branch of the *philosophe* movement whose ideas focused on economic, political, and administrative issues. Master-theorist Quesnay, a surgeon by training of course, drew a parallel between the scientific physician's care of the ailing body and the rationalist, physiocratic administrator, who acted as a political physician on the body social: 'the appalling crisis will come', he noted to the marquis de Mirabeau, 'and it will be necessary to have recourse to medical knowledge'.[24] The reform projects of physiocratic minister Turgot in the mid-1770s took this line of analysis further, equating legitimate power with scientific rationality in government and administration, and making health policy in particular, dictated by the government, tempered by public support and implemented by public authorities, a major part of his programme. *Bienfaisance* in the medical sphere should be administered for the public good from on high through the structures of public law.[25]

In such accounts, 'police' came close to being viewed as the quintessentially civilizing force. Furetière's Dictionary had made the term an antonym of *la barbarie*. The glory of the *état policé* of western European societies, when compared with their global contemporaries, was that the rational forces of *police* had softened *mœurs* and produced the most civilized state which humans had ever attained. Collective human happiness seemed to be in reach through the rational processes of (in the words of a Parisian police official) 'the science of governing men'.[26]

[23] M. Raeff, 'The Well-Ordered Police State and the Development of Modernity in Seventeenth- and Eighteenth-Century Europe: An Attempt at a Comparative Approach', *American Historical Review*, 80 (1975), 1221–43; G. Rosen, *From Medical Police to Social Medicine: Essays on the History of Health Care* (New York, 1974) (though it should be noted that Rosen places less emphasis on the presence of medical policing in France than we do here); and, for the links with health and the environment, L. J. Jordanova, 'Earth Science and Environmental Medicine: The Synthesis of the Late Enlightenment', in id. and R. Porter (eds.), *Images of the Earth: Essays in the History of the Environmental Sciences* (n.p., 1979).

[24] Cited in R. L. Meek, *The Economics of Physiocracy: Essays and Translations* (London, 1962), 18.

[25] We are drawing here on the analyses of K. M. Baker, *Inventing the French Revolution: Essays on French Political Culture in the Eighteenth Century* (Cambridge, 1990), esp. 'French Political Thought on the Accession of Louis XVI', 109 ff., and 'Science and Politics at the End of the Old Régime', 153 ff. We acknowledge, with Baker, the importance of tension between the often rather 'hands-off' physiocratic project and the more classically bureaucratizing thrust of 'police'. See too D. Dakin, *Turgot and the Ancien Régime in France* (London, 1939); C. C. Gillispie, *Science and Polity in France at the End of the Old Regime* (Princeton, 1980), 3 ff.

[26] The phrase derives from the police official Le Maire in a 1770 report, and is recorded in Raeff, 'Well-Ordered Police State', 1235 n. Cf. Furetière, *Dictionnaire universel* (3 vols.; The

The search for collective happiness was, moreover, routed through the quest for better communal health. In France, as in cameralist Germany, there was a strongly demographic aspect to state *bienfaisance* and medical police. Enlightenment thinkers—the physiocrats not least—placed great emphasis on the productiveness of a large population. Consequently, care of communal health and the reduction of avoidable morbidity and mortality were high priorities. These aims were exemplified in belated state moves to improve midwifery, thus saving maternal as well as infant lives in childbirth.[27] By endorsing the use of male midwives since early in the reign of Louis XIV, the crown played a crucial part in establishing an alternative group of obstetric practitioners, whose numbers and influence continued to grow in the eighteenth century.[28] For the first part of the century, however, the state did little to improve the quality of the much larger group of traditional midwives who continued to deliver the vast majority of the nation's babies. The regulations reorganizing midwifery in 1730 were clearly an attempt to ensure that practitioners were at least competent by introducing a national system of examination and licensing under the control of the surgical corporations. But as most midwives escaped the licensing net, the move was of limited value.[29] Central government displayed little interest in the establishment of proper institutionalized training, and left matters largely in the hands of local medical, municipal, and religious authorities—which were more often interested in the spiritual orthodoxy of midwives than their technical skill. Prior to 1745, any initiatives in establishing courses came from the faculties: Strasburg appointed a professor in 1728 and Paris in 1745.[30] Government insouciance in this respect was, though, still shared by most medical men: the physician Boissier de Sauvages, just appointed professor in Montpellier's prestigious medical faculty, cheerfully and relievedly admitted to a friend in 1735, on announcing his wife's successful production of their first child, that 'the Faculty of Women is I think more learned that the Faculty of Professors when it comes to childbirth'.[31]

Hague, 1690), art. 'police'; and, for the general anthropological and world-historical perspective, D. Gordon, 'Philosophy, Sociology and Gender in the Enlightenment Concept of Public Opinion', *French Historical Studies*, 17 (1992), 882–91, esp. 894 ff.

[27] For improvements in midwifery, the key text is J. Gélis, *La Sage-femme ou le médecin? Une nouvelle conception de la vie* (Paris, 1988). See too M. Laget, *Naissances: L'Accouchement avant l'âge de la clinique* (Paris, 1982).

[28] See above, Chs. 4, Sect. E, and 9, *passim*.

[29] See above, Ch. 8, Sect. C. Cf. M. Laget, 'Childbirth in Seventeenth- and Eighteenth-Century France: Obstetrical Practices and Collective Attitudes', in R. Forster and O. Ranum (eds.), *Medicine and Society in France: Selections from the 'Annales'* (Baltimore, 1980), 147–8; and R. L. Petrelli, 'The Regulation of French Midwifery during the Ancien Régime', *Journal of the History of Medicine*, 26 (1971), 276–92.

[30] See above, p. 501; and L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries* (Oxford, 1987), 394.

[31] BM Nîmes MS 414 (Sept. 1735).

From around mid-century, however, the issue started attracting a good deal more attention. Government reports, medical writings, and social and economic analysts increasingly highlighted the shortcomings of existing levels of obstetrical care, and linked it to the, in fact quite groundless, belief in declining levels of population. The depopulation thesis had been popularized by Montesquieu, who had argued in 1721, when the Marseilles plague was raging, that France's strength had declined from an earlier maximum of 20 millions to a mere 14 millions. Later in the century, Quesnay, whose particular worry was rural depopulation, maintained that the population in 1750 stood at 16 millions, as against 24 millions a century earlier. Though Voltaire latterly harboured suspicions that such views might be statistical hogwash, they remained current throughout the first two-thirds of the century. Indeed when in 1765 the political arithmetician Expilly proposed a current figure of 21 millions, he was widely excoriated for lack of scientific rigour and was accused of being a lackey of corrupt courtiers wishing to hoodwink the public. Though the depopulationist theory was increasingly discredited down to 1789, anxiety remained in place, and spurred a critique of techniques for managing the production and early care of what seemed to be a dwindling number of children.[32]

The principal target of attack on the conditions of birth and early infancy became the aged, illiterate, superstitious *matrone* who as midwife (*sage-femme*) supervised deliveries, keeping surgeons and physicians (often literally) at arm's length and presiding over a depressingly predictable but, it was held, avoidable massacre of the innocents. Deaths and disablings through obstetrical maladroitness were held to be cancelling out chances of population growth and leading to the degeneration of the French nation.[33] Even the foetus, it seemed, wanted to have its say: in an anonymous *Requête des enfants à naître contre les sages-femmes* ('Request of Children Still to be Born against Midwives') which appeared in Montpellier in 1782, 'Foetus, syndic du corps' requested that the provincial Estates should 'forbid midwives, on pain of death, from disabling, mutilating, tearing, stifling us, or pulling us to pieces, and to decree in future that we shall be received with all the decency and respect that French politeness requires'. The text went on to paint a grim picture of 'these ever-eternal *matrones*, crude, ugly enough to make one swoon, inept and incapable of giving us any aid, and clumsy beyond belief'.[34] There were more than enough features of this dark tale witnessing to the rankest prejudice in its eponymously embryonic author: the

[32] J. and M. Dupâquier, *Histoire de la démographie* (Paris, 1985), 173 ff.; J. C. Perrot, 'Les Économistes, les philosophes et la population', in J. Dupâquier (ed.), *Histoire de la population française*, ii. *De la Renaissance à 1789* (Paris, 1988), esp. 511 ff.

[33] Cf. Gélis, *Sage-femme*, 54, 101 ff.

[34] E. Fraisse (ed.), *Requête des enfants à naître contre les sages-femmes* (Montpellier, 1873 edn.), 41 ff.

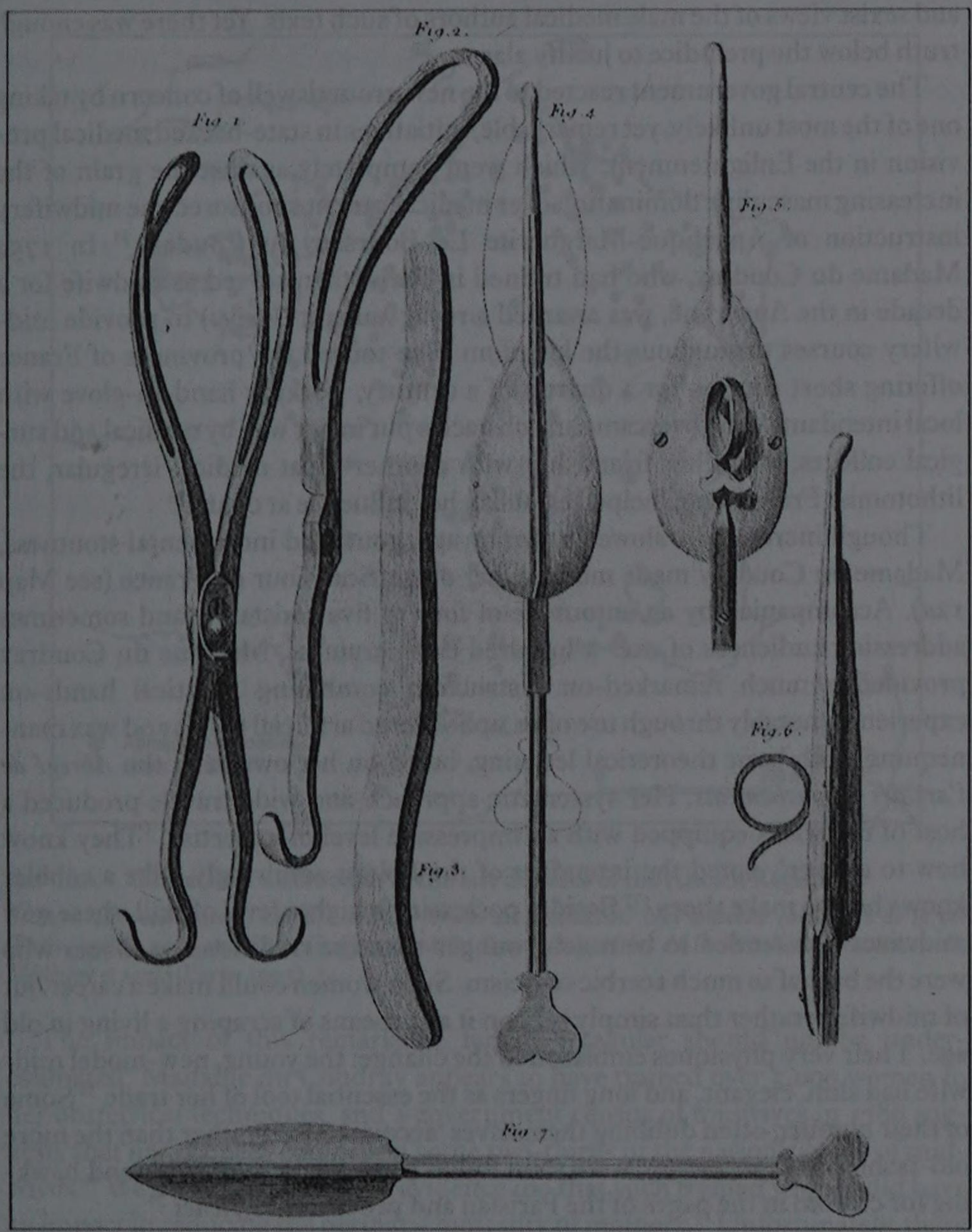


ILLUSTRATION 22. Obstetrical forceps, the Dutch lever, and other surgical instruments. Invented by the Chamberlen obstetrical dynasty in the seventeenth century, the forceps made a steady progress across continental Europe in the eighteenth century. This engraving comes from plates devoted to surgery in the great *Encyclopédie*, quintessential agent of diffusion of enlightened science.

general attack on the 'superstition' (denoting piety) and 'illiteracy' of midwives and the critique of medical expertise in women reflected the often anticlerical

and sexist views of the male medical authors of such texts. Yet there was enough truth below the prejudice to justify alarm.

The central government reacted to the new groundswell of concern by taking one of the most unlikely, yet remarkable, initiatives in state-backed medical provision in the Enlightenment, which went completely against the grain of the increasing masculine domination over medical care: it sponsored the midwifery instruction of Angélique-Marguerite Le Boursier du Coudray.[35] In 1759 Madame du Coudray, who had trained in Paris, then served as midwife for a decade in the Auvergne, was awarded a royal warrant (*brevet*) to provide midwifery courses throughout the kingdom. She toured the provinces of France offering short courses for a quarter of a century, working hand-in-glove with local intendants, who overcame any obstacles put in her way by medical and surgical colleges, while her friendship with another great medical irregular, the lithotomist Frère Côme, helped establish her influence at court.[36]

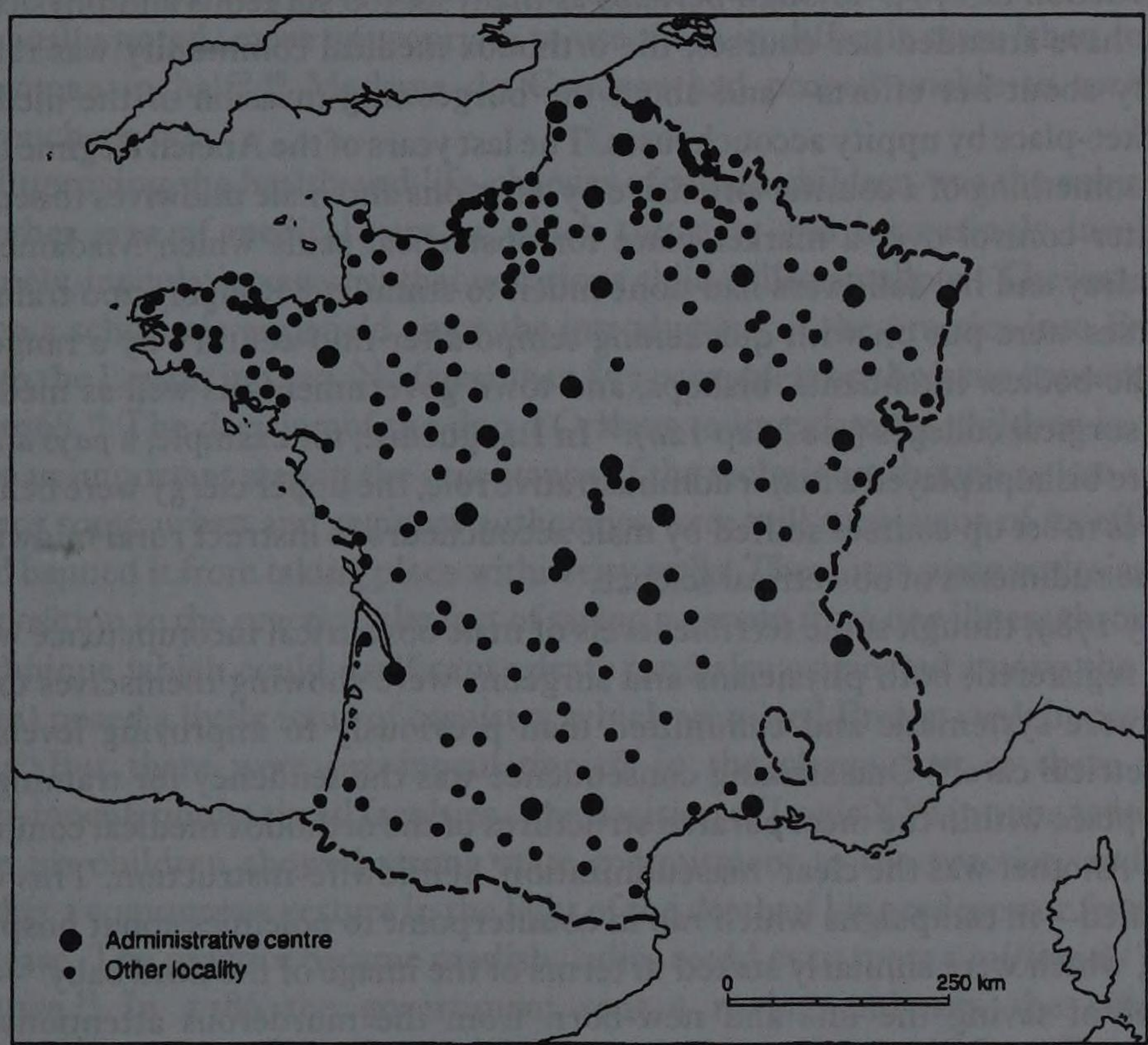
Though increasingly slowed down by age, gout, and incremental stoutness, Madame du Coudray made much of her obstetrical Tour de France (see Map 12*a*). Accompanied by an entourage of four to five assistants, and sometimes addressing audiences of over a hundred eager trainees, Madame du Coudray provided a much remarked-on instruction combining practical hands-on experience (notably through use of an upholstered artificial pelvis and wax mannequins) with basic theoretical learning, based on her own text, the *Abregé de l'art des accouchements*. Her systematic approach and wide travels produced a host of midwives equipped with an impressive level of expertise. 'They know how to deliver', noted the intendant of the Poitou admiringly, 'like a cobbler knows how to make shoes.'[37] Besides possessing a higher level of skill, these new midwives also tended to be much younger than the traditional *matrones* who were the butt of so much acerbic criticism. Such women could make a career out of midwifery rather than simply rely on it as a means of scraping a living in old age. Their very physiques emblazoned the change: the young, new-model midwife had slim, elegant, and long fingers as the essential tool of her trade.[38] Some of their number, often dubbing themselves 'accoucheuse' (rather than the more old-fashioned *sage-femme*), were soon found publicizing their skills and hawking for custom in the pages of the Parisian and provincial *Affiches*.[39]

[35] Besides Gélis, *Sage-femme*, 111 ff., see esp. N. R. Gelbart, 'Midwife to a Nation: Madame du Coudray serves France', in H. Marland (ed.), *The Art of Midwifery: Early Modern Midwives in Europe* (London, 1993). Nina Gelbart is preparing a book-length manuscript on Mme du Coudray.

[36] On Côme, see below, p. 748. [37] Cited in Gelbart, 'Midwife to a Nation', 138.

[38] Gélis, *Sage-femme*, 140, citing regulations from Besançon in 1777.

[39] For age profiles of traditional midwives, see Laget, 'Childbirth in Seventeenth- and Eighteenth-Century France', 165; for advertising accoucheuses, see e.g. *Affiches des Evêchés et de Lorraine*, 10 Feb. 1780, 25 Aug. 1785, etc.



MAP 12*a*. Obstetrical instruction in the last decades of the Ancien Régime

Sources: adapted from J. Gélis, *La Sage-femme ou le médecin? Une nouvelle conception de la vie* (Paris, 1988), 120; and J. P. Goubert and R. Rey (eds.), *Atlas de la Révolution française*, vii. *Médecine et santé* (Paris, 1993), 54.

The impact of this remarkable female irregular should not be underestimated: Madame du Coudray appears to have trained over 5,000 women in her obstetrical techniques, and a government census of midwives in 1786 suggests that her trainees comprised some two-thirds of the nation's corps of midwives.[40] We are beginning to get evidence too that such trained women did have an impact in reducing the perinatal mortality of mothers.[41] Unfortunately, there were to be no women of Madame du Coudray's stature, charisma, and connections to relay her extraordinary efforts, following her retirement from practical

[40] Gélis, *Sage-femme*, 121; Gelbart, 'Midwife to a Nation', 144.

[41] See the interesting evidence recently adduced for rural Normandy in S. Beauvalet-Boutrouyie and J. Renard, 'Des sages-femmes qui sauvent les mères? (1777–1806)', *Histoire Economie et Société*, 13 (1994), 269–90: perinatal mortality for mothers dropped from 8.68 to 5.31 ‰, the decline being most impressive on the first day after birth.

instruction in 1783. Though perhaps as many as 500 surgeons and physicians may have attended her courses, the orthodox medical community was rather sniffy about her efforts—and about the burgeoning invasion of the medical market-place by uppity accoucheuses. The last years of the Ancien Régime thus saw something of a counter-offensive by surgeons and male midwives to secure greater control over a market-place for obstetrical skills which Madame du Coudray and her followers had done much to stimulate. Roughly 200 training courses were put on with quickening tempo after mid-century by a range of public bodies: intendants, bishops, and town governments as well as medical and surgical colleges (see Map 12*a*).[42] In Languedoc, for example, a *pays d'état* where bishops played a major administrative role, the upper clergy were behind moves to set up courses staffed by male accoucheurs to instruct rural midwives in the rudiments of obstetrical science.[43]

By 1789, though some terrible levels of male obstetrical incompetence were still registered, both physicians and surgeons were showing themselves to be far more systematic and committed than previously to improving levels of obstetrical care.[44] One striking consequence was the tendency for training to take place within the incorporated structures of the orthodox medical community. Another was the clear 'masculinization' of midwife-instruction. This was justified—in campaigns which ran in counterpoint to polemics about hospital care, which were similarly staked in terms of the image of the dead baby[45]—in terms of saving the un- and new-born from the murderous attentions of *matrones*. Courses were now more likely to be run by male 'demonstrators' than by the female heirs of Madame du Coudray, whom élite medical opinion now characterized as too arrogant to seek qualified male help.[46] Even when Madame du Coudray's fame was at its height, moreover, the government had also promoted male initiatives: in 1769, for example, it put massive support behind the diffusion of a popular obstetrical manual, the Paris physician Joseph Raulin's *Instruction succincte sur les accouchements des sages-femmes de province*, and this was even translated into numerous local languages, including Breton.[47] The fact, moreover, that surgical regulations invariably prohibited women from the exercise of any surgical instruments meant that only male midwives had unfettered access to the forceps. The latter's prestige, though contested even by

[42] Gélis, *Sage-Femme*, 131 ff.; J. P. Goubert and R. Rey (eds.), *Atlas de la Révolution française*, vii. *Médecine et santé* (Paris, 1993), 54.

[43] AN H1092; Laget, *Naissances*, 219 ff.; G. Frêche, *Toulouse et la région Midi-Pyrénées au siècle des Lumières (vers 1670–1789)* (Toulouse, 1974), 113 ff. Cf. for Brittany, Goubert, *Médecine et malades en Bretagne*, 114 ff.

[44] Cf. complaints in AD Aisne C632.

[45] See above, Ch. 11, Sect. E. [46] See e.g. *Gazette de santé*, 28 Oct. 1773.

[47] The Breton text appeared in 1775. See J. N. Biraben, 'Le Médecin et l'enfant au XVIIIe siècle (Aperçu sur la pédiatrie au XVIIIe siècle)', *Annales de démographie historique*, 10 (1973), 216.

some surgeons, was growing over the century. It was generally, Mercier sardonically noted, more appropriate to use them in difficult cases 'than to saw a woman in half'.[48] Madame du Coudray had proved unable to turn the accoucheur tide.

Improving the health and life-chances of young children was the subject of another area of medical care in which the state was increasingly involved; namely, inoculation against that notorious child-killer, smallpox. The issue had been a scholastic minefield since the introduction of the practice into France from the Levant in 1727. No fewer than 877 pamphlets on the issue appeared up to 1768.[49] The decision of the duc d'Orléans to inoculate his children in 1756 was an important step in the acceptance of the technique, though as late as the 1770s some urban and regional authorities were still suspicious of its efficacy and banned it from taking place within city walls. There was some ecclesiastical opposition to the practice: the fact of saving a person from one illness through a technique which could itself cause death (and also originated among the heathen) posed a lively issue of casuistry, which animated Breton *curés* in particular.[50] But there were pro-inoculationists in the clergy, just as there were anti-inoculationists in all faculties. The decision of Louis XVI in 1774 to inoculate his children showed strong state commitment to the practice, and was rather a courageous gesture in the light of the death of his predecessor from the disease. The practice became modish: ladies could even sport a *coiffure à l'inoculation*.[51] In 1786 the government sent a roving emissary, the surgeon Jauberthon, around the provinces, practising inoculation of foundlings and other children located in *hôpitaux généraux*. In the same year, admission to military academies and to Saint-Cyr (the finishing school for aristocratic girls) was formally barred to those who had not been inoculated.[52]

[48] *Tableau de Paris* (12 vols.; Amsterdam, 1782–8), v. 73. For use of forceps, see above, Ch. 9, Sect. A; and Laget, *Naissances*, 243 ff. Yet women did use these and other instruments. Cf. Gélis, *Sage-femme*, 345 ff.

[49] C. Bloch, *Assistance et l'état*, 250. For inoculation, see P. Darmon, *La Longue Traque de la variole: Les Pionniers de la médecine préventive* (Paris, 1986); id., *La Variole, les nobles et les princes: La Petite Vérole mortelle de Louis XV* (Brussels, 1989); and Y. M. Bercé, *Le Chaudron et la lancette: Croyances populaires et médecine préventive, 1798–1830* (Paris, 1984). See also above, Ch. 7, Sect. E.

[50] For these sources of opposition to the practice, see Darmon, *Longue Traque de la variole*, 76 ff., 94 f.; R. Favre, *La Mort dans la littérature et la pensée françaises au siècle des Lumières* (Lyons, 1978), 260 ff. For urban resistance to intra-muros inoculation, cf. Frêche, *Toulouse et la région Midi-Pyrénées*, 111; *Affiches du Dauphiné*, 25 Feb. 1780 (Lyons); E. Leclair, *Histoire de la chirurgie à Lille* (2 vols.; Lille, 1911–12), ii. 295; and AM Montpellier FF (unclassified documents).

[51] J. McManners, *Death and the Enlightenment: Changing Attitudes to Death among Christians and Unbelievers in Eighteenth-Century France* (Oxford, 1981), 47.

[52] Darmon, *Longue Traque de la variole*, 138; Favre, *Mort dans la littérature française*, 264. For Jauberthon, see AN O' 768; and his *Instruction relative aux opérations de M. Jauberthon pour l'inoculation des enfants trouvés et orphelins dans les différentes généralités du royaume* (n.p., n.d.) (copy in ASRM 168 d.2); for his visit to Montpellier, see AD Hérault, Archives de l'Hôpital

The state's growing interest in using new medical technologies to improve life-chances at birth and in infancy was neatly matched by measures targeted at circumstances which brought death through asphyxiation and drowning, grounded in the growing academic interest in ascertaining the moment at which death could be said to occur.[53] A new method of dealing with bodies fished out of the Seine was popularized by the *lieutenant général de police* in Paris in the early 1770s. Rather than simply laying them out to dry in the sun, turning them upside down, or rolling them in barrels as had been the former practice, the new technique included rubbing eau-de-vie and ammoniac on various parts of the body and blowing tobacco smoke up the anus. Improbably enough, its success rate was impressive, and a proper service was organized along the banks of the Seine. Propaganda about the new method was circulated in the provinces through intendants, subdelegates, and parish priests. Between 1772 and 1788 the Paris *lieutenant général de police* also subsidized a journal, *Détail des succès de l'établissement que la ville de Paris a fait en faveur des personne noyés*, edited by Philippe-Nicolas Pia.[54] Less elaborate publicity was also given to new methods of dealing with individuals who appeared to have died by asphyxiation—a fate commonly found in the unhealthy crowded tenements of the city with their inefficient wood-burning grates and stoves.[55]

The combination of innovative medical technologies with the administrative skills of the absolutist state had striking application too in regard to the attempts to manage the incidence of peak mortality. Such an approach had, of course, been given a considerable boost by the response to the Marseilles plague epidemic of 1720–2, which had provided a paradigm for the management of disease-related disaster which was much resorted to over the rest of the century.[56] Of central importance in that paradigm was the role of the central government in directing operations. Despite the disappearance of the plague after 1722, the idea of a state-organized cordon sanitaire to segregate affected areas, with the central government directing the supply of subsistence and medicines, was increasingly refined, and was extended to epizootics and to regional dearths. The danger of exceptionally high death levels in the years of bad harvests and

Général de Montpellier (antérieures à 1790) G74. According to the *Affiches de l'Orléanais*, 30 Dec. 1768, inoculation had been practised at the state military academy, the École Militaire, as early as 1768.

[53] See e.g. François Thiéry, *La Vie de l'homme respectée et défendue dans ses derniers moments* (Paris, 1787).

[54] J. Sgard (ed.), *Dictionnaire des journaux, 1600–1789* (2 vols.; Oxford, 1991), no. 351; Bloch, *Assistance et l'état*, 250 f.; A. J. Williams, *Police of Paris*, 413 f. Cf. Mercier, *Tableau de Paris*, i. 140 ff.

[55] C. Bloch, *Assistance et l'état*, 250 f.; Mercier, *Tableau de Paris*, vol. i, ch. 46, and vol. ii, ch. 135. Cf. D. Roche, *The People of Paris: An Essay in Popular Culture in the Eighteenth Century* (Leamington Spa, 1987), 135 ff.

[56] See above, Ch. 6, Sects. A and B.

soaring bread-prices from 1739 to 1742, for example, were blunted by government welfare initiatives: the royal intendants played a strategic role in monitoring dearth-affected areas, channelling food and remedies towards afflicted regions and helping to spawn local initiatives to cope with the problem.[57]

Then again, the cattle plague of 1745 to 1748 saw the traditional methods of segregating sick animals in times of epizootic complemented by the establishment of cordons sanitaires and by more systematic efforts at disinfection. The epizootic of 1773–6, which was responsible for the death of huge numbers of livestock in the south-west, saw an even more dramatic level of government intervention. Livestock benefited from an administrative technology which had won its spurs for humans at Marseilles in 1720. Controller-General Turgot commissioned the ambitious young Norman physician Vicq d'Azyr to act as coordinator of moves to contain and eradicate the disease.[58] Vicq effected a triage of areas: pest-free zones were to observe precautionary hygienic measures, threatened areas were to have a full and drastic regimen imposed, while the heartlands of the disease were to be segregated by a cordon sanitaire. Huge quantities of drugs and disinfectants were shipped into infected areas, hecatombs of animals were slaughtered and then buried in quicklime, government remuneration was offered to farmers at the rate of one-third the value of slaughtered animals, and so on. Peasants could be forgiven for not always being overjoyed at such government solicitude: the army and the rural police force, the *maréchaussée*, were given unprecedented powers to search out and destroy potentially infected animals, even in areas not yet touched by the epizootic. *Police*, even medical police, signified repressive action as well as 'rational', charitable, *bienfaisant* intent.

The 1773–6 epizootic showed that the medical voice was now listened to, at local as well as at central levels. The government's action against the cattle plague had been conjugated according to the commissioned reports of Vicq d'Azyr and the Parisian physician Jean-Jacques Paulet, and medical men had a major role in local implementation. This reflected a more general governmental resort to medical practitioners as consultants and local agents. The practice of sending physicians as roving medical agents into disaster-stricken areas was becoming more generally commonplace. Luminaries from the Montpellier Medical Faculty were sent to report on an epidemic at Lectoure in 1745, for example, just as their predecessors had done at Marseilles in 1720.[59] They were

[57] J. B. Post, *Food Shortage, Climatic Variability and Epidemic Disease in Preindustrial Europe: The Mortality Peak in the Early 1740s* (Ithaca, NY, 1985), 152 ff. and esp. 168 f.

[58] Gillispie, *Science and Polity*, 24 ff.; C. Hannaway, 'Medicine, Public Welfare and the State in Eighteenth-Century France: The Société Royale de Médecine (1776–1793)', Johns Hopkins Univ. Ph.D. diss. 1974, 82 ff.; and, more generally, S. T. McCloy, *Government Assistance in Eighteenth-Century France* (Durham, NC, 1946), 106 ff.

[59] AD Hérault C529. For other exx. in the 1740s, involving Montpellier professor Boissier de Sauvages see his day-book, at ibid. 10F51.

emulated by the Paris Faculty and medical colleges, and after mid-century such missions became utterly routine. From about 1770, for example, the intendant in the Maine systematically expedited medical men towards disease-stricken areas, and standard rates of reward were applied: physicians were allowed a per diem fee of 10 *livres*, surgeons anything between 2 and 5 *livres*. The physician Turpin received 500 *livres* for 58 days on medical mission during an epidemic of 1773–4. The intendant also footed the bill for any drugs prescribed and (a larger expense this) for soups, bouillons, and other foodstuffs for convalescents and those at risk from the illness—and also from local healers, whom government emissaries regarded as a major health hazard.[60] The idea of a special service for epidemics developed apace from the early 1770s onwards, and climaxed, as we shall see, in the establishment of the Royal Society of Medicine in 1778. There was a particularly marked medical input into moves against the great dysentery epidemic of 1779, which was probably the deadliest epidemic in France between the last plague outbreak of 1720 and the first cholera outbreak of 1832, and which caused nearly 200,000 deaths, mainly in the centre and west.[61]

Though the state was swift to stipend medical men in times of emergency, it resisted calls for a state-funded medical service in normal times. In Germany and the Low Countries, in contrast, it was common practice for local instances of the state to employ communal physicians funded out of local taxes.[62] In France, the practice of town and village councils appointing a physician or surgeon on a stipend had become popular in the period when plague was a regular threat. As plague receded, however, many municipal and village authorities distanced themselves from a practice whose cost was borne by local taxpayers. The central government used provincial intendants to monitor local expenditure (if only so as to safeguard populations' capacity to pay national taxes), and these looked increasingly askance at regular financial commitment for communal physicians. The practice was too deeply rooted in areas of eastern France formerly subject to Germanic influence, it would appear, to be as severely affected, but elsewhere the government purged city budgets of such items of expend-

[60] P. Delaunay, *Études sur l'hygiène, l'assistance et les secours publics dans le Maine sous l'Ancien Régime* (Le Mans, 1922), 218 (the first medical envoy Delaunay records had been sent out in 1758). Cf. Goubert, *Médecins et malades en Bretagne*, 108 ff.; McCloy, *Government Assistance*, 158 ff.; F. Lebrun, 'Chirurgiens et guérisseurs en Haute-Bretagne à la fin de l'Ancien Régime', *Annales de Bretagne*, 83 (1976); R. Leclerc, 'La Vie médicale à Saint-Lô (XVIe–XVIIe–XVIIIe siècles)', *Notices, mémoires et documents publiés par la Société d'agriculture, d'archéologie, et d'histoire naturelle du département de la Manche*, 40–2 (1928–30), 83.

[61] F. Lebrun, 'Une grande épidémie en France au XVIIIe siècle: La Dysenterie de 1779', *Hommage à Marcel Reinhard: Sur la population française aux XVIIe et XIXe siècles* (Paris, 1973). For the Royal Society of Medicine, see below, Sects. D and E.

[62] A. W. Russell (ed.), *The Town and State Physician in Europe from the Middle Ages to the Enlightenment* (Wolffenbüttel, 1981). Cf. above, Ch. 4, Sect. C.

iture. The young Boissier de Sauvages, for example, had a difficult time finding a post of this sort in the early 1730s in Languedoc.[63] An epidemic in nearby Nissan in the diocese of Béziers in 1733 led the city fathers to hire a local physician to supervise health care, yet when in the following year the township tried to add an item onto its budget to pay the fees of the hapless physician, they were refused permission to do so by the intendant of Languedoc.[64] Physicians should be paid for out of the pockets of their clients, it seemed, rather than those of taxpayers: medical police should supplement rather than supplant private medical treatment.

The central government thus forebore from using medical men as regular, everyday state agents of health maintenance, and left a larger niche for the workings of the medical market-place than more cameralistic polities. The central government in France consequently looked to agents of voluntary charity to bear some of this burden. *Bureaux de charité* at parish level were encouraged to employ physicians and surgeons to proffer skilled medical aid to home relief cases. In some towns, this service became a highly effective means of compensating for the shortcomings of local hospital care: the Confrérie de la Miséricorde in Montpellier, for example, which had a highly sophisticated medical service, was adjudged to act 'like an extension of the Hôtel-Dieu'.[65]

Central government also envisaged the parish priests being a potential means of health maintenance for the population at large. In this they drew support from many *philosophes* who, despite their mundane anticlericalism, often expressed admiring approval of the dedicated post-Tridentine parish priest. Voltaire's slogan 'Ecrasez l'infâme!' did not extend to *le bon prêtre* any more than to the sister of charity, and his voice was only one in a swelling chorus of approval.[66] Often taking their cue from Austria and Germany, where cameralists assigned the parish clergy an important role in medical police, the abbé de Saint-Pierre, Prévost, Montesquieu, Rousseau, Bernardin de Saint-Pierre, and

[63] The Boissier de Sauvages case, regarding the Cévenol *bourg* of Marsillargues, can be followed in correspondence with Montpellier professor Henri Haguenot (AD Hérault, Archives de l'Hôpital Général de Montpellier [antérieures à 1790] B90); in the municipal archives (ibid., Archives communales de Marsillargues BB 19); and in correspondence with the Nîmes physician Baux (BM Nîmes, MS 414). Boissier secured the post, but gave it up to assume his professorship in Montpellier. In 1746–7 the post was definitively ended, under pressure from the intendant. For eastern France, cf. Verdier, *Jurisprudence de la médecine*, ii. 516 ff. There are signs of erosion in the practice even here in the last years of the Ancien Régime: see J. Dubois, *L'Assistance dans le district de Bar pendant la Révolution* (Bar-le-Duc, 1930), 24.

[64] AD Hérault, Archives de l'Hôpital et Charité de Nissan (unclassified papers).

[65] AD Hérault C5957. Cf. ibid., G1353; and C. Jones, *Charity and 'Bienfaisance': The Treatment of the Poor in the Montpellier Region, 1740–1815* (Cambridge, 1982), 53 ff.

[66] For Voltaire, cf. above, p. 686. On the theme of the good priest in general, see P. Sage, *Le 'Bon Prêtre' dans la littérature française d' 'Amadis de Gaule' au 'Génie du christianisme'* (Geneva, 1951).

sundry other writers contributed to the refurbishment of the image of the good priest. Natural, tolerant, peace-loving, spokesman for his community, the parish priest was fitted out as a prime agent of enlightenment, progress, and multi-purpose *bienfaisance* in the countryside. It was inevitable therefore that the health dimensions of *bienfaisance* should involve them as agents of medical police, all the more in that the post-Tridentine clergy had played a role, as we have seen, in caring for the bodies as well as the souls of their parishioners.[67] *Curés* were thus veritably bombarded by the central government—usually through the office of the controller-general and at local level the intendants and subdelegates—with medical propaganda of every conceivable kind: the virtues of inoculation; midwifery courses; new ideas on rabies, ergotism, and asphyxia; treatment for syphilis; and much else besides which they were enjoined to pass on to their parishioners. They were often recipients too of the *boîtes des remèdes* sent out by central government. The pulpit was primed to become a key site for government information and welfare propaganda.[68] Significantly, the clergy were frequently accorded a supportive role in the numerous popular medical handbooks stressing the importance of medical self-help. Tissot, for example, clearly evoked their number as the potential audience for his much republished work of medical vulgarization, *Avis au peuple sur sa santé*, which he targeted at 'intelligent and charitable persons living in the countryside who by a kind of providential vocation are called on to assist with their advice all those who live alongside them'.[69]

It is a tribute to the growing ideological hegemony of the idea of bodily health which we traced earlier, moreover, that the ecclesiastics who participated in the drive for improved health tended to do so according to orthodox medical lore rather than divine laws. With a few striking exceptions such as the alleged Jansenist miracles at the cemetery of Saint-Médard in the 1730s, there was growing diffidence among medical and religious élites towards miraculous or faith-healing—a development mirrored too in the monarch's loss of confidence in his own thaumaturgic powers over the king's evil.[70] Those clerics most prominent in the provision of medical services, therefore, were those who played according to scientific rules rather than ecclesiastical prestige. The civil authorities, increasingly imbued with the orderly principles of medical police, were more intolerant than formerly towards unsupervised medical practice by ecclesiastics. The *parlements* in particular played a discreet but important role in defending the ortho-

[67] Cf. above, Ch. 1, Sect. D.

[68] For the *remèdes*, see above, Sect. A. The intendance records to be found in the series C of numerous provincial archives are full of such printed ephemera.

[69] (Lausanne, 1761), 20: cited in R. Rey, 'La Vulgarisation médicale au XVIIIe siècle: Le Cas des dictionnaires portatifs de santé', *Revue d'histoire des sciences*, 44 (1991), 421.

[70] See above, Ch. 6, Sect. E, and, for the king's evil, p. 388.

dox medical community against ecclesiastical incursions: the Paris Parlement took action to rein in the medical activities of the Minimes of the Place Royale, the Petits Augustins, and the Pères de Nazareth in the 1720s and 1730s, and in 1760 not only assailed the Jesuits but forbade all religious houses from selling drugs (a ban which, it must be said, was far from totally effective).[71]

Those members of the clergy who kept a high-profile position within the medical world thus tended to do so on terms supported by at least a good segment of the corporative medical community. The lithotomies of the Feuillant cleric Frère Côme (Jean Baseilhac), for example, were viewed as marvels of surgical legerdemain, from which trained physicians and surgeons should—and did—learn, rather than divinely ordained miracles. Côme, who developed his expertise by practising first on animals then on cadavers and who performed over 1,000 lithotomy operations on individuals ranging from penniless paupers to the archbishop of Paris, was a scientific virtuoso, respected by his medical peers, and not a thaumaturge.[72] Other individual ecclesiastics achieving renown for their philanthropic medical services were the abbé de l'Epée and his successor abbé Sicard, who devoted their careers to the education of deaf-mutes; and the abbé Sans, whose experiments with medical electricity won support from the Academy of Sciences and the patronage of the state as well as the vigorous hostility of the future *Ami du peuple* Jean-Paul Marat (1743–93), at this time a rather discredited and down-at-heel scientist, and physician on the staff of the comte d'Artois.[73]

The Brothers of Charity, in contrast, split the medical community. Their specialist skills in surgery and in the care of the insane were widely acknowledged by many disinterested medical observers. Premier physician Joseph de Lassone had indeed served as a surgical apprentice on the wards of the community's Hôpital de la Charité in Paris in the late 1730s, and he like many medical men drew inspiration from the medicalized services of the hospital.[74] Surgeons, in contrast, particularly those based in Paris, were bitterly opposed to the community's rights of practice, and engaged in a half-century of dispute against them. Interestingly, while the Parisian surgeons were only too swift to use

[71] M. Fosseyeux, 'Les Apothicaireries des couvents sous l'Ancien Régime', *Bulletin de la Société de l'histoire de Paris et de l'Île de France*, 46 (1919), 57–8; AN ADXI 12A. See too above, Ch. 10, Sect. C.

[72] A. H. Chevreau, *Un grand chirurgien du XVIIIe siècle: Frère Côme* (Mesnil-sur-Estrée, 1912); M. Fosseyeux, 'L'Hôtel-Dieu de Paris et le secret de la taille au XVIIIe siècle', *Bulletin de la Société française d'histoire de la médecine*, 12 (1913), 458–79.

[73] For de l'Epée and Sicard, see D. B. Weiner, *The Citizen-Patient in Revolutionary and Imperial Paris* (Baltimore, Md., 1993), 228 ff. (with a helpful bibliography on 357 f.); for Sans, Delaunay, *Monde médical*, 360 ff.; and for Marat, Gillispie, *Science and Polity*, 290 ff. Marat's post did not entail service on the comte, the king's brother.

[74] T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980), 106 f.

arguments of public utility to justify the extension of their own influence at the expense of physicians, they tended to get on their corporative high horse where the Brothers of Charity were concerned: the public was bound to suffer, surgeons disparagingly held, if such clerics chose to ignore their allotted place in the scheme of things and meddle in medical affairs without proper training.[75] Symptomatically, the surgeons lost this struggle: in 1761 a governmental decree confirmed the right of the Brothers of Charity to practise.

In general terms, though, the clergy in France never achieved unqualified acceptance as a viable corporative conduit of medicalization as it did in the heartlands of cameralist theory in Germany.[76] Whenever ecclesiastics who were involved in the practice of medicine looked as though they might stray too far over their vocational limits, moreover, a burgeoning chorus of hostility by the medical professions towards unlicensed medicine, 'charlatanism', and 'counterfeiting Aesculapiuses'[77] drove them back. Jean-Emmanuel Gilibert's swashbuckling attack in 1772 on *L'Anarchie médicinale*, which spared the sensibilities of no medical practitioner of any kind, was not alone in holding such irregulars as assassins rather than healers. He urged ecclesiastics to abandon the practice of medicine and take to advertising the services of local physicians from their pulpits.[78]

C. From 'The Great Confinement' to 'The Great Clean-Up'

The Marseilles plague of 1720 spawned a veritable academic industry of books, pamphlets, and ephemera concerned with the character of the disease at the heart of the epidemic. Most physicians believed that in some sense the disease came from 'out there' and moved around in the air, though there was a good deal of division as to its exact genesis: if God was for most the primary cause, secondary causation could focus on planetary conjunctions, volcanoes, cesspits, or whatever. 'Contagionists', however, were less preoccupied by remote secondary causes, and placed greater emphasis on the possibilities and mechanisms of

[75] *Mémoire pour le Premier Chirurgien au Roi contre les Frères de la Charité* (Paris, 1757): see e.g. 49, where the surgeons evoke the need to ensure 'the correspondence of all parts among themselves so as to produce the harmony of the whole'—a nicely corporatist way of disparaging the clerics. For a host of pamphlets on this dispute, see *Recueil de pièces et mémoires pour les maîtres es l'art et science de chirurgie* (BN 8-T18–120 (multi-vol.)), iii. See too Verdier, *Jurisprudence de la médecine*, ii. 401 ff.; and P. Delaunay, *La Médecine et l'Église: Contribution à l'étude de l'exercice médical* (Paris, 1948), 86 ff.

[76] Cf. R. Heller, ' "Priest-Doctors" as a Rural Health Service in the Age of Enlightenment', *Medical History*, 20 (1976), 361–83.

[77] For the latter phrase, see the *Affiches de Chartres* in 1785, cited in Sgard (ed.), *Dictionnaire des journaux*, no. 20.

[78] *L'Anarchie médicinale, ou la médecine considérée comme nuisible à la société* (3 vols.; Neuchâtel, 1772), ii. 242 ff., 248, 261, 298 ff.

proximate causation. Some of this group followed Jansenist Philippe Hecquet in arguing the case for poison-bearing miasmas; others, such as Jean Astruc, talked of a 'pestilential yeast' (*levain*); and others still, like Jean-Baptiste Goiffon (1658–1730) and Deidier, ascribed communication of the disease to the action of tiny worms or insects. 'Anti-contagionists'—following Chicoyneau, of course—preferred to highlight environmental factors, and emphasized how many deaths were caused by the incidental consequences of a plague attack: trade disruptions, for example, which caused hunger and ill health, or fear and panic, which induced proneness to disease psychosomatically. In terms of Newtonian empiricism, it was utterly logical to reject disease vectors which were beyond human apperception, even with a microscope, and which therefore resembled the occult explanations of yesteryear. In the event, the academic squabble remained precisely that. In terms of practicalities, divergences faded from sight. Even anti-contagionists could accept that it was important, in time of plague, to act as though one believed in plague's contagiousness, if only so as to keep the affected population from a condition of total and counterproductive panic. The contagionists, for their part, accepted the importance of the kinds of environmental protectionism which had been employed at Marseilles.[79]

This routine academic squabble thus highlighted a growing, and highly significant, medical consensus over the eighteenth century to highlight the importance of the environment in disease causation. The aetiology of collective disease should be located within a pathogenic environment rather than in the humoral disposition of the afflicted. Hippocratic verities concerning the role of airs, waters, places were now updated, first, by a concern with collective rather than individual health; second, by the associated conviction that a set of scientifically proved techniques could cleanse the environment of noxious, morbiferous elements; and, third, by the implication that those techniques were to be found in a combination of social and ecological engineering and medical police.[80] The 'great confinement' of the late seventeenth century had been predicated on an assumption that disease and impurity was located in the poor, who should be segregated in hospitals away from the normal, sane, and healthy subjects of the Sun King. By the second half of the eighteenth century, with the hospital as an institution in crisis, as we have seen, this rationale was looking more than a little threadbare. The tendency now was to locate disease less in particular social groups than in a diseased environment—which could be cleansed. The logic of the 'Great Confinement' gave way to the rationale for a 'Great Clean-Up'.

[79] For an interesting discussion of the battlelines in such cases, see J. Ehrard, 'Opinions médicales en France au XVIIIe siècle: La Peste et l'idée de contagion', *Annales ESC* 12 (1957), 46–59. Cf. id., *L'Idée de la nature en France dans la première moitié du* XVIIIe *siècle* (2 vols.; Paris, 1963), esp. ii. 697 ff.; and above, Ch. 6, Sect. A.

[80] See above, Ch. 6, Sects. C–F.

Analysis of a site—and an accompanying conviction that human manipulation of the environment could produce improvements in collective health—lay at the heart of the medical topography movement which evolved in France from mid-century onwards, and whose diverse origins were explored in Chapter 7.[81] The end-product was a strong intellectual tendency to seek diagnosis of collective illness and good health (rather than focusing on the individual), and a parallel tendency to lodge that diagnosis in environmentalist terms. The traditional Hippocratic medicine of avoidance in time of epidemic was thus given an Enlightenment twist: the diseased site could be quarantined and modified by enlightened physicians and administrators. If disease could be understood in environmentalist terms through observing, counting, and measuring pathogenic signs, the hope was that it could also be cured, so that the chances of cure depended on environmental as well as intrinsic action: it seemed crucial to respond to disease by measuring, calibrating, and improving the ecological dimension of morbidity. In some ways, such a view vindicated Chicoyneau at Marseilles in 1720. Though modern readers shudder with apprehension at the Montpellier physician's starry-eyed (yet first-hand) conviction that bubonic plague was not contagious, his emphasis on the importance of the epidemic constitution derived from much the same set of intellectual sources as would dictate the movement of socio-ecological improvement which triumphed in the last decades of the Ancien Régime. Magnificently wrong-headed in some ways, the approach did have the, at times almost incidental, effect of purifying the site of many of the sources of disease which a present-day epidemiologist would detect lurking unrecognized in the stinking environment.

Military medicine, as in so much else, was a pioneer of public health reform in this domain. From the mid-1760s Richard de Hautesierck's journal, the *Recueil d'observations de médecine des hôpitaux*, launched under the reforming war minister Choiseul, aimed at data-collection of clinical, geographical, social, and meteorological materials, with the aim of doing everything possible to ensure 'the conservation of soldiers'. In the first volume, for example, physician Pierre Fournier provided a medical topography encompassing 'the situation, air, and waters' of Montpellier—an account which covered the diet, mores, and health patterns of the city's inhabitants as well as descriptions of the site and its climate; a list of precautions utilized in the city's *hôtel-dieu* to ensure cleanliness and prevent sickness; and a statistical account—which borrowed from the nosological approaches of Boissier de Sauvages and Razoux—of the diseases

[81] For excellent European overviews of the intellectual traditions involved, see Riley, *Eighteenth-Century Campaign to Avoid Disease*; Jordanova, 'Earth Science and Environmental Medicine'; and, more generally, A. Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination*, Eng. trans. (New York, 1986), and G. Vigarello, *Concepts of Cleanliness: Changing Attitudes in France since the Middle Ages*, Eng. trans. (Cambridge, 1988).

encountered in the hospital for each month of 1763. This was to be the prototype of others which, it was hoped, would be communicated to the journal: 'we demand', the editor noted, with an imperious tone that smacked of the principles of medical police, 'that correspondence should be regulated according to the works of Hippocrates'.[82]

Though the *Recueil* failed to establish the system of correspondence and communication which it intended, the theme of medical topography became firmly entrenched in the thinking of physicians and administrators in the last decades of the Ancien Régime. It was to be medical topography which, as we have seen, indicted the hospital, that 'olfactory inferno', as a pathogenic site at the heart of urban living, and spurred the movement to improve, through a military-style policing of the site, its levels of hygiene.[83] If it were to live up to its assigned role as a *machine à guérir*, the hospital would have to ensure that stench ceded its place to suavity, cleanliness, and purity.

Among other characteristic institutions within the eighteenth-century city to be analysed, and condemned, from this angle of approach was the cemetery. The presence of the decaying vestiges of the body, both in cemeteries and in places of interment within churches and chapels, was vigorously attacked.[84] The environmentalist conviction that the stench of putrefying air generated disease had surfaced in an enquiry on the famous cemetery of the Innocents in Paris commissioned by the Parlement of Paris and conducted in 1737–8 by two Paris physicians. A related study in 1744 on the noxious effects of church vaults in Montpellier, written by Faculty professor Henri Haguenot, increased anxiety. Significantly, priests as well as medical men supported a rupture with age-old custom: as early as 1745 the abbé Porée in Caen was writing animatedly in support of cemetery relocation on the grounds of 'cleanliness and health'.

In 1758 the Parlement of Brittany proscribed burial in churches, and in 1763 a royal decree ordered the placing of cemeteries outside Paris' walls. The

[82] 'Préface', *Recueil*. Richard, like Fournier a Montpellier alumnus, was a senior military hospitals inspector. For Razoux and Boissier de Sauvages, see above, Ch. 11, Sect. E. For the *Recueil*, see Sgard (ed.), *Dictionnaire des journaux*, no. 1166. For medical topography in general, see Jordanova, 'Earth Science and Environmental Medicine'; Hannaway, 'Medicine', 71 ff.; and J. P. Peter, 'Aux sources de la médicalisation, le regard et le mot: Le Travail des topographies médicales', in *Populations et cultures: Études réunies en l'honneur de François Lebrun* (Rennes, 1989).

[83] See above, Ch. 11, Sect. E. Corbin, *Foul and the Fragrant*, 3, for the 'inferno'.

[84] Riley, *Eighteenth-Century Campaign*, 101 ff. The Parisian ex. here recounted can be followed in M. Foisil, 'Les Attitudes devant la mort au XVIIIe siècle: Sépultures et suppressions de sépultures dans le cimetière parisien des Saint-Innocents', *Revue Historique*, 510 (1974), 303–30; C. and O. Hannaway, 'La Fermeture des cimetières des Innocents', *Dix-Huitième siècle*, 9 (1977), 181–91; J. Thibaut-Payen, *Les Morts, l'Église et l'état: Recherches d'histoire administrative sur la sépulture et les cimetières dans le ressort du parlement de Paris aux XVIIe et XVIIIe siècles* (Paris, 1977); P. Ariès, *The Hour of Our Death*, Eng. trans. (London, 1981), 475 ff.; and J. McManners, *Death and the Enlightenment*, 306 ff.

campaign still had to be implemented. The archbishop of Toulouse (and future first minister of Louis XVI), Loménie de Brienne, guided a decree prohibiting burial in churches through the Estates of Languedoc in 1774, then through the national Assembly of the Clergy in 1775, and this led to a royal edict iterating the prohibition in 1776. Following the outbreak of an epidemic around the Innocents' cemetery in 1780, the government decreed its formal closure, the exhumation of bones and bodies to another site—a massive operation conducted in the years leading up to the Revolution—and the removal of other cemeteries outside city walls. Though in the late 1780s the Paris chronicler Louis-Sébastien Mercier still railed against the 'cadaverous odour' to be found in churches, the suburbanization of Paris cemeteries was well under way by 1789. In the provinces too, there was movement along these lines: Languedoc was the pioneer, but in Orléans, burials in churches were forbidden in 1786, and in Beauvais in 1788.[85]

Two additional points about the cleanliness campaigns conducted against hospitals and cemeteries deserve attention. First, there was a heavy dependence on the utility of experimental science in policy-formation. The attention of a surgeon such as Jacques Tenon to the exact calibration of hospital space under the influence of current theories of air has already been noted.[86] Attacks on the place of both hospitals and cemeteries at the heart of human habitation was similarly conducted with much reference to the morbidity and mortality statistics, chemical theory, and attempts to measure stench—the idea of a eudiometer popularized by English scientist Joseph Priestley was significant here.[87] The second noteworthy fact about the campaigns directed against hospitals and cemeteries was the way in which both became major issues of public concern. There was an appeal to the reading public in particular as a kind of print tribunal which could adjudicate the natural justice of the case, for example, for such a major shift in traditional practices as the relocation of the cadavers of the Christian community. The question of the fate of the Innocents sparked dozens of pamphlets, agitated crowds, and filled newspaper columns, and came to resemble a *cause célèbre*, in which public opinion was being invoked as a source of moral and political legitimacy.[88]

[85] Besides the works cited above, n. 84, see too F. Lebrun, *Les Hommes et la mort en Anjou aux XVIIe et XVIIIe siècles: Essai de démographie et de psychologie historiques* (Paris, 1971), 481 ff.; and Mercier, *Tableau de Paris*, i. 128.

[86] See above, p. 728.

[87] S. Schaffer, 'Measuring Virtue: Eudiometry, Enlightenment and Pneumatic Medicine', in A. Cunningham and R. French (eds.), *The Medical Enlightenment of the Eighteenth Century* (Cambridge, 1990).

[88] See the references at n. 84, above. For the legal *cause célèbre* as a tribunal of public opinion, see S. Maza, *Private Lives and Public Affairs: The Causes Célèbres of Pre-Revolutionary France* (Baltimore, 1993).

Other noxious sites besides hospitals, cemeteries, and corpse-laden churches came under environmentalist attack in the last decades of the Ancien Régime. This was a movement which was largely led by its nose. As J. C. Riley has demonstrated, Enlightenment cities throughout western Europe subscribed to a veritably programmatic approach to health improvement grounded in the Hippocratic principles of medical topography and involving, besides cemetery relocation, drainage, lavation (improved water-supply), and ventilation and aimed above all at the removal of stench.[89] Drainage of marshland aimed to remove the smell of putrefying matter in water-logged land and, hopefully, bring sterile land under cultivation. The extremely widespread practice of removing city walls often involved the filling-in of moats and perimeter ditches whose stench in hot weather seemed to mark them out as a source of illness.[90] In rural areas, drainage works—encouraged by state legislation from the 1760s—were established in notoriously marshy areas like Bas-Languedoc, the Dombes, the Landes, and the Sologne as part of general state-backed moves towards agrarian improvement and extension in the area of cultivable land. On the Mediterranean coast, for example, collaboration between the intendant and the provincial Estates brought a good deal of improvement in marshy, lagoon-strewn littoral villages notorious for ill health. Scientific experimentation with drainage techniques were also brought to bear, while medical envoys investigating epidemics were often influential: a report on an almost certainly malarial epidemic at Mèze in 1768 condemned 'the dirtiness of the streets and the banks of the lagoon' along with the poverty of the inhabitants as the main causes of sickness and went on to argue the case for land reclamation.[91]

Concomitant measures of lavation—better water-supplies, improved rubbish-collection methods, closer policing of trades such as butchers and tanners which posed problems of noxious waste—aimed to clear the urban site of stench and waste matter. In even small villages a veritable war was waged against compost-heaps. These were often located on the main streets and squares, and often took the form of huge stinking pits into which drunken denizens occasionally slipped and drowned. These venerable yet dangerous institutions were increasingly pushed to the outskirts of habitation.[92] To follow the municipal

[89] Riley, *Eighteenth-Century Campaign*, *passim*.

[90] e.g. J. Bardet, *Rouen aux XVIIe et XVIIIe siècles: Les Mutations d'un espace social* (Paris, 1983), 164; G. Viard, *Tradition et lumières au pays de Diderot: Langres aux XVIIe et XVIIIe siècles* (Langres, 1985), 143 ff.

[91] AD Hérault C2850. Also on this area, see Jean-Antoine-Claude Chaptal, *Mémoire sur l'insalubrité de l'air des étangs et les moyens d'en détruire la cause* (Montpellier, 1781). For drainage work in the context of land reclamation, see F. Braudel and E. Labrousse (eds.), *Histoire économique et sociale de la France*, ii. *1660–1789* (Paris, 1970), 417 ff.

[92] The dossier of reports and other materials in AD Hérault 89M1 gives an excellent oversight of this problem dating from the First Empire, but extensible back to the Ancien Régime. Cf. too M. Agulhon, *La Vie sociale en Provence intérieure au lendemain de la Révolution* (Paris, 1970), 35 f.

records of a small to middling town like Langres (population 7,000–8,000) over the eighteenth century, for example, is to witness the slow drip-feed tempo of micro-improvements in the urban environment based on principles of lavation: dangerously crumbling ramparts levelled and the rubbish-tips outside them flattened and/or removed; squares and market-place enlarged and opened up; roads and streets drained, levelled, and resurfaced; shop- and house-fronts aligned; hospitals modernized; cemeteries relocated; rubbish-removal improved; obligations of street-cleaning imposed on householders; street-lighting introduced; water-supply updated; public promenades and squares developed.[93]

The scientific community rallied to the cause of cleaner, more abundant water in the campaign against stench. Chemists were especially adept at using the social uses of the fledgling science as a means of achieving fame and reputation.[94] Some analysed waters in order to seek out noxious elements, others expatiated on the virtues of new types of sewers and septic tanks, others specialized in the analysis of mineral-water sources whose health-giving potential was widely vaunted. The government appointed the physician Gabriel-François Venel to inventorize and analyse all the mineral-water sources of the kingdom—a task which proved too much for him, especially once he was elected to a chair in the Montpellier Medical Faculty.[95] Chemists were also to the fore in composing new perfumes and disinfectants: hydrochloric acid was developed in 1773 and was put to use straight away in the great epizootic of 1774–6, while *eau de Javelle* was created in 1788.[96] If the disease-ravaged stable was one laboratory in which new techniques in the deodorization and purification of public space were essayed, the same could moreover be said for the hospital, the barracks, the ship, the army tent, the prison, the *dépôt de mendicité*.[97]

Micro-experiments in environmental engineering in these latter locations extended to ventilation, which advances in pneumatic chemistry had made something of a craze. Attempts to ensure the better circulation of air were focused in the city as a whole and in crowded and enclosed places (hospitals, prisons, meeting-halls, plus some private dwellings), and had important ramifications for town-planning (demolition of ramparts, removal of street encumbrances, etc.) and for domestic and public architecture (large windows and, in public buildings, the construction of domes and cupolas now showed a determi-

[93] Viard, *Tradition et lumières*, 42 ff. Langres can be taken to represent a trend which was, *a fortiori*, much more advanced in Paris and the bigger cities but which was present to some degree in all villages and small towns.

[94] J. Perkins, 'Patronage, Power and the Market: Making Chemistry in Provincial France at the End of the Ancien Régime', unpub. paper, kindly communicated by the author.

[95] J. J. M****, *Éloge historique de M. Venel* (Grenoble, 1777); E. H. Guitard, *Le Prestigieux Passé des eaux minérales* (Paris, 1951), 157 ff.

[96] Corbin, *Foul and the Fragrant*, 104 and *passim*.

[97] Cf. esp. ibid. 105 ff.

nation to keep air on the move). The salubrious circulation of air, it was hoped, would relieve smell caused by social intercourse and human waste, and the public was assailed by a flood of writings and demonstrations of sundry experiments with bellows, vaults, fans, and the like.[98]

The combined effect of this host of micro-improvements in urban living had a powerful impact on representations of the city. These not only highlighted the latter's role as a social, economic, and cultural dynamo, beneficently bringing the pleasures of urban life to a larger population but also, paradoxically, by sensitizing town-dwellers to environmental hazard cast the city as morbific and mortiferous. We see this contradiction particularly clearly in the case of Paris. The 'centre of science, arts, fashion, and taste' was also, one medical writer opined, 'the centre of stench'.[99] Mercier's *Tableau de Paris* (1782–8) portrayed the city as a pathogenic locale, full of gothic oozings, putrid stenches, and insalubrious habits. Yet the capital had undergone an intense environmental overhaul in the eighteenth century, in which the *lieutenant général de police* played a crucial part. Another well-informed witness, surgeon Jacques Tenon, writing in the same year as Mercier, noted of the reign of Louis XVI,

> Never, in any reign has more care been given to opening up streets, laying bare bridges, establishing quays, distancing butchers' premises and rubbish-dumps, in a word making air circulate, drying out the soil, guaranteeing the city from the dangerous effects of piles of putrid matter—all these precautions which increasingly favour the salubrity of the city.[100]

We should beware of taking Tenon too literally, but it was clear that the material environment of Paris had been considerably reshaped and progressively sanitized by 1789. That sanitization was relayed and intensified, moreover, by a greater concern for private health and cleanliness. The development was most marked among the social élite. Though it has been argued that the royal court was the principal source of emulation, sanitary conditions there still left much to be desired. The only water-closets to be found in Versailles were in the private rooms of Louis XVI and Marie-Antoinette. The privy had made some progress over the century: Rousseau spent hours seated on one and Louis-Philippe duc d'Orléans received visitors while similarly enthroned. Yet the well-attested urinal stench of corridors and tapestries at Versailles, which would return along with the monarch to besmirch the palace under the Bourbon Restoration, rather

[98] Riley, *Eighteenth-Century Campaign*, 102 ff.

[99] Chauvet (1797), cited in Corbin, *Foul and the Fragrant*, 27.

[100] Cited in Favre, *Mort dans la pensée et littérature françaises*, 248. Useful too in assessing the impact of urbanization is [Nicolas Toussaint Le Moyne] Des Essarts, *Dictionnaire universel de police* (6 vols.; Paris, 1776), i, introd. Mercier, it should be pointed out, is also a good witness to the insalubrious aspects of Parisian life. Cf. below, Sect. F.

subverts the idea of the court as pioneer of the 'civilizing process'.[101] If there was emulation in the rituals of cleanliness it seems rather to have emerged out of the tidy-mindedness and domestic comforts of the bourgeoisie. The lower middle classes appear to have caught the cleanliness bug over the century, as their more frequent possession of the bric-à-brac of personal cleanliness attested: inventories reveal more mirrors, razors, syringes, bowls, water-jugs, foot-baths, bidets, chamberpots, and the like.[102]

The combined impact of these processes of environmental engineering and greater sensitivity to personal hygiene among the middling and upper classes on mortality and morbidity is exceptionally difficult to assess—the clarity and calm certainty of normative and prescriptive texts contrasts with the aura of uncertainty over their implementation and effects. The neo-Hippocratic medical theory on which the 'great clean-up' was based underplayed and at times even flatly contradicted the possibility of epidemics spreading through human contact, so that measures introduced could scarcely fail to do full justice to the nature and complexity of disease transmission. So too, the development of more refined manners probably owed more to an itch for social distinction than for bodily cleanliness. Often, moreover, the environmental reform programme included measures of nugatory effect in reducing disease: ringing church bells, burning sulphur, sprinkling vinegar, firing cannons, for example, were all classic but still much-used techniques employed since the days of plague to clear the air of noisome smells by getting it moving. None the less, even though it was based on a highly deficient medical theory, the cleanliness drive which towns and cities undertook did probably improve the health of the site. Drainage, for example, incidentally helped to reduce malaria-bearing mosquito populations. This and other measures to reduce the environment's propensity to produce ill health, by attacking the arthropod vectors of disease, did most likely have some effect. Similarly, the shift from heavy textiles to lighter, cleaner cloths in dress and interior decoration also amounted to a war on vermin. As J. C. Riley sagely notes, the salad days for insects and rodents drew to a close in the late eighteenth century, as a 'great dark age' opened up before them.[103] Irrespective of whether it was right or wrong, the eighteenth-century campaign to avoid disease power-

[101] Corbin, *Foul and the Fragrant*, 73 ff.; J. C. Bologne, *Histoire de la pudeur* (Paris, 1986), 153 ff.; A. Franklin, *La Vie privée d'autrefois: L'Hygiène* (Paris, 1890), 41 and *passim*. The canonical source for the history of manners, which emphasizes the role of the court is N. Elias, *The Civilizing Process*, i. *The History of Manners* (New York, 1978).

[102] See D. Roche, *People of Paris*, *passim*; A. Pardailhé-Galabrun, *La Naissance de l'intime: 3000 foyers parisiens, XVIIe–XVIIIe siècles* (Paris, 1988), 356 ff. More generally, see also W. C. Coleman, 'Health and Hygiene in the *Encyclopédie*: A Medical Doctrine for the Bourgeoisie', *Journal of the History of Medicine*, 29 (1974), 399–421; and D. Outram, *The Body and the French Revolution: Sex, Class and Political Culture* (London, 1989), esp. ch. 4.

[103] *Eighteenth-Century Campaign*, 138.

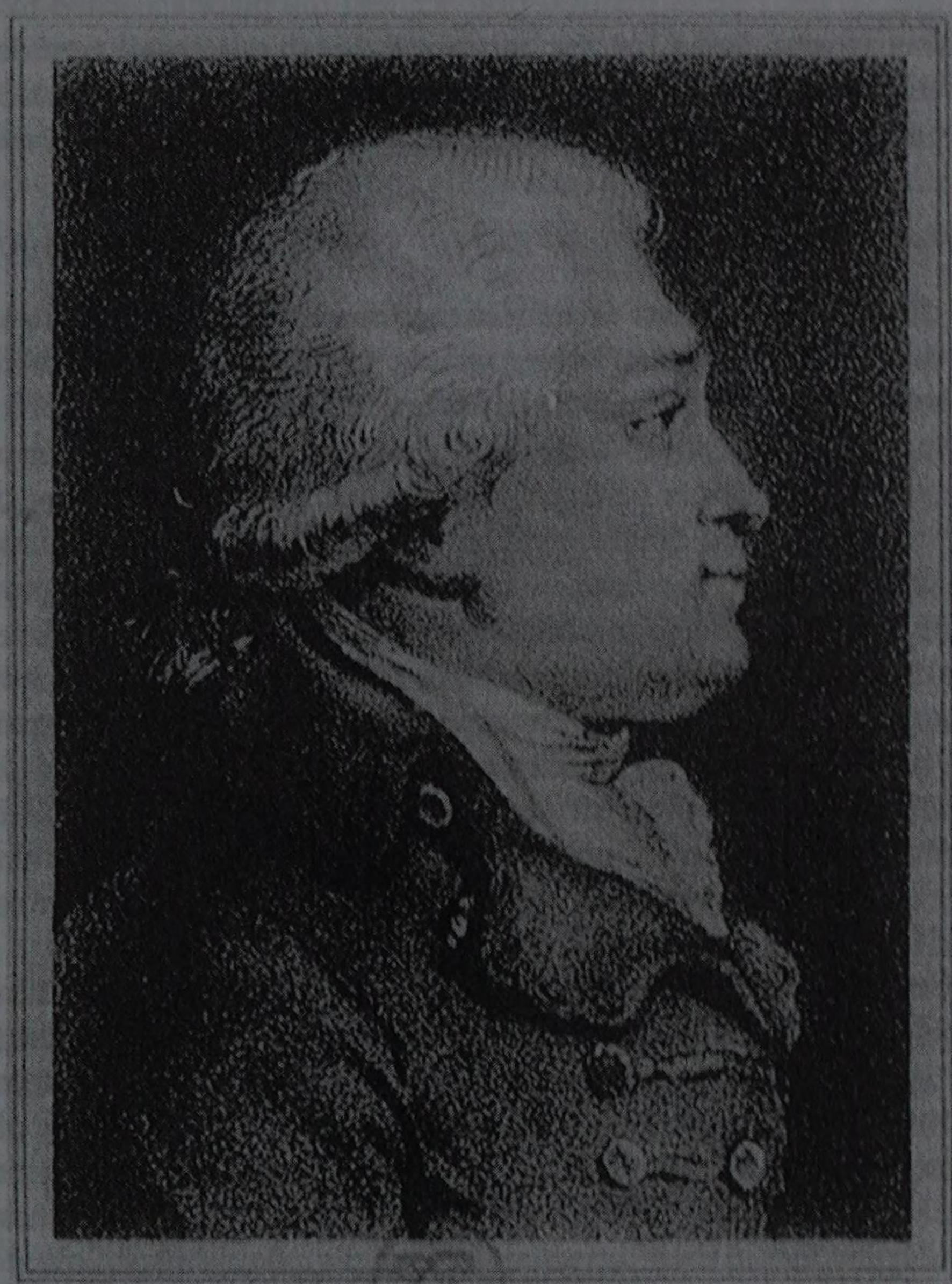


ILLUSTRATION 23. Félix Vicq d'Azyr. Only the Terror and his own early death prevented this court physician, luminary of the late Enlightenment, and perpetual Secretary of the Royal Society of Medicine from its inception, from playing an even more outstanding role in French intellectual and political life.

fully influenced the face of medical practice and the place accorded to health issues within society. And it further buttressed that unmistakable confidence in the possibilities of human intervention to improve collective health which was, as we have seen, such an important component in Enlightenment social thought.

D. The Royal Society of Medicine and the Struggle for Medical Authority

As it had developed by the last decades of the Ancien Régime, medical police—infused with the values of *bienfaisance* and the physiocratic mood—seemed to offer a blueprint for environmental improvement and the creation of a large, productive, and healthy population. That blueprint was based on four principles: first, medical authority (the agents of hygienic improvement were trained medical practitioners and their acolytes and emphatically not unlicensed charlatans or unmonitored ecclesiastics); second, scientific method (the inductive method including clinical trials and laboratory syntheses now replaced the authority of the ancients as guideline); third, publicity (the working model was a top-down, diffusionist one, whereby new methods and ideas percolated from a central base down through society and into its peripheries); and fourth, bureaucracy (the whole movement was supervised and implemented by the key structures of public administration: police authorities in the cities, intendants and subdelegates in the provinces, supported by subaltern corporative ecclesiastical and lay bodies).

These features of medical police achieved a kind of apotheosis in the Royal Society of Medicine, which received its royal charter in 1778.[104] The origins of the Society lay in the campaign waged by Vicq d'Azyr against the epizootic in south-western France in 1774–5 under the progressive liberal ministry of Turgot. Turgot, impressed by all that Vicq had achieved, sent out a questionnaire to provincial intendants in 1775 requesting information on the commonest epidemics and epizootics in their jurisdictions, and in 1776 this was followed up by the creation of a Commission for Epidemics headed by Joseph de Lassone, premier physician-elect, and with six commissioners plus Vicq as secretary. The body was to act as a clearing-house for information about epidemics and epi-

[104] Hannaway, 'Medicine, Public Welfare and the State' is the best account. There is a helpful overview too in J. Goldstein, *Console and Classify: The French Psychiatric Profession in the Nineteenth Century* (Cambridge, 1987), 5 ff. The work of J. P. Peter on the Society's work is exciting but has never been completed. See esp. his 'Les Mots et les objets de la maladie: Remarques sur les épidémies et la médecine dans la société française de la fin du XVIIIe siècle', *Revue historique*, 246 (1971), 13–38; and id., 'Une enquête de la Société royale de Médecine (1774–1794): Malades et maladies à la fin du XVIIIe siècle', *Annales ESC* 22 (1967), 711–51. Useful too is J. P. Desaive and E. Le Roy Ladurie (eds.), *Médecins, climats et épidémies à la fin du XVIIIe siècle* (Paris, 1972). For the origins of the Society, see esp. Hannaway, 'Medicine, Public Welfare and the State', 95 ff.; and Gillispie, *Science and Polity*, 24 ff.

zootics, collating and coordinating reports from diverse sources, and it was to act as a consultancy too, for commissioners could be sent out as emissaries to report on epidemics and to prescribe appropriate health policies. Vicq's alliance with the skilful court physician-politician Lassone was opportune. Lassone was able to hold on to government support for such a body despite Turgot's fall from power and subsequent ministerial changes. He was also able to extend its powers: the charter document of 1778 recorded the transmutation of the Committee of Epidemics into a much grander, larger, and better-funded Royal Society of Medicine, whose remit was extended to include the supervision of mineral waters throughout France and the vetting and licensing of proprietary medicines. These prerogatives were confirmed in royal letters patent awarded in 1782.

In many respects, the Royal Society of Medicine was a late Enlightenment version of the kind of academy-style organizations which, from the foundation of the Académie française of 1635 and the Academy of Sciences of 1666 (and as further witnessed by the Academy of Surgery of 1731), had benefited from royal patronage to establish corporative influence and, more broadly, political and epistemological authority. All were monarchical, hierarchical, prescriptive, and privileged, in C. Gillispie's words.[105] The Society's founders preened themselves on setting down the roots of a highly beneficial and socially useful institution, which rose above corporative sectionalism, and, in its quest for medical truth, exemplified scientific neutrality and objectivity. The style of their procedures was very self-consciously scientific and deliberately modelled on their academic forebears: they held collective work-sessions and ceremonial public meetings; awarded *jetons* (tokens) for attendance of members; extended membership rights to associates drawn from public life; corresponded with learned societies at home and abroad; held prize essay competitions; and undertook to publish their proceedings and meritorious scientific work (the *Histoire de la Société royale de Médecine ... avec les Mémoires de Médecine et Physique Médicale*, founded in 1778, had produced ten sumptuous volumes by the time of the Revolution).[106]

The science at whose altar the Society worshipped was, moreover, very much the empirically orientated, publicly useful science of the Enlightenment. This was nicely exemplified in the tentacular provincial outreach which the Society achieved. The honorific post of corresponding member was initially accorded to

[105] *Science and Polity*, 81.

[106] Cf. Hannaway, 'Medicine, Public Welfare and the State', esp. 120 ff. for the procedural aspects. For the *Histoire et Mémoires*, see Sgard (ed.), *Dictionnaire des journaux*, no. 603. The vols. constitute an invaluable source for the Society's history. For the 'academic culture' of the Enlightenment, see esp. R. Hahn, *The Anatomy of a Scientific Institution: The Paris Academy of Sciences 1666–1803* (Berkeley & Los Angeles, 1971); and D. Roche, *Le Siècle des Lumières en province: Académies et académiciens provinciaux, 1680–1789* (2 vols., Paris, 1978).

over one hundred medical practitioners—physicians for the most part, though with a sprinkling of surgeons, pharmacists, and veterinarians[107]—scattered widely through the cities and small towns of provincial France. In an inspired act of Enlightenment scientific teamwork, these were encouraged to produce medical topographies of their locality and to send in detailed reports on epidemics, meteorological, medical and surgical anomalies, operations and striking medical cases, and reports on medical experiments. By the systematic collection and collation of scrupulously recorded data, observations, and experiments, a new science of man could, it was hoped, be collectively created. A medical science informed by the discoveries of anatomy, physics, chemistry, botany, veterinarian studies, and other cognate disciplines would thus benefit the wider community. Particular stress was placed on careful recording: much confidence was invested in the improved technology of barometers, thermometers, and eudiometers (for measuring impurities in air) in achieving stable and comparable raw data, and on the sheer scientific dedication of medical practitioners in coping with the minutiae of morbid states.[108] This campaign for medical topographies, which forms one of the most impressive monuments to the neo-Hippocratic tradition in the late Enlightenment, testifies to the Society's fidelity to the environmentalist premisses of public health reform. Myriad physicians in the cities, *bourgs*, and villages of provincial France vied emulatively to produce (and to have endorsed by the Society and published in its *Mémoires*) their own little medical topography, replete with calibrated meteorological, environmental, and demographic evidence, as part of the quest for a better understanding of the relationships between disease and its sites.[109]

In the interests of public health, the Royal Society of Medicine until 1789 performed an impressive array of scientific tasks, sometimes on its own initiative, sometimes at the request of individuals, but especially too at the behest of the public authorities. Rooted in the academic culture sponsored by the state, it drew sustenance from the medical police tradition, and enjoyed close links with the central structures of public administration which no other medical body could match. It was well connected at court—notably through Lassone, the Society's life president until his death in 1788, and Vicq d'Azyr, appointed personal physician to Queen Marie-Antoinette in the same year. It had its representatives in the other major institutional organs of Ancien Régime academe, notably the Academy of Sciences. Even more important, it worked hand-in-glove with all the important domestic ministries: the controller-general (and by

[107] The latter were a small group, largely comprising graduates from the veterinary schools at Lyons and Alfort.

[108] For the eudiometer, see Schaffer, 'Measuring Virtue'.

[109] The seminal ex. of the genre was Lépecq de la Cloture's study of Normandy: see above, p. 463.

1780 the incumbent Necker, was treating the Society as an integrative part of public administration, a virtual health ministry in its own right); the controller-general's office for links with provincial administrators; the navy and army ministries for military and naval health matters; and the royal household (*maison du Roi*) for mineral waters issues. It cultivated good relations too with the Paris *lieutenant général de police*, Lenoir, who was given the rank of associate member in the Society, and who utilized the Society as a means of policing medical charlatanism within the city.

The Society's members were used as consultants to government on all the main public health issues of the day: the question of the fate of the Paris Hôtel-Dieu, for example, the relocation of the Innocents' cemetery, medical uses of electricity, naval hygiene, sewage works, and so on. They were in addition commissioned as official health consultants when epidemics broke out. Indeed, their role here seemed ripe for extension when in 1786 controller-general Calonne wrote to the intendants requesting a list of medical personnel in the provinces who could help with epidemics, and urged that intendants adopt a system of appointing *médecins des épidémies* in a given area. Some intendants developed this initiative further: in Brittany, for example, Bertrand de Molleville established a sophisticated system of health officers.[110] Only the approach of the Revolution diverted the attention of controllers-general away from matters of public health and medical police to more pressing financial and political concerns.

With one foot firmly planted in the field of state-backed medical police, the Society also claimed a prominent place in the emerging public sphere. Where the traditional faculties were normally restrained about the uses of publicity, secretary Vicq d'Azyr made sure that the Society's assemblies and prize essay competitions were among the most heavily carried scientific news stories in the national and provincial press; the twice-yearly public meetings—open, unusually, to women as well as men—were major orchestrations; and the Society's *Histoire et Mémoires* were used as a means of diffusing scientific data and heightening its own collective profile. The Society was also largely behind the establishment in 1782 of the *Journal de médecine militaire*, which was edited by Jacques de Horne, one of the Society's luminaries, and distributed gratis to military and provincial practitioners.[111] The significant increase in the volume of medical publication which the Society appeared to be sponsoring or encouraging on the eve of the Revolution alarmed some within the core of the corporative medical community. The Lyons College of Medicine is alleged to have complained that the Society

[110] Hannaway, 'Medicine, Public Welfare and the State', 178. For the 1786 enquiry, see J. P. Goubert, 'The Extent of Medical Practice in France around 1780', *Journal of Social History*, 10 (1977), 410–27.

[111] Cf. M. Martin, *Les Origines de la presse militaire en France à la fin de l'Ancien Régime et sous la Révolution* (Paris, 1975), 52 ff.; Sgard (ed.), *Dictionnaire des journaux*, no. 672.

was making so much medical information available within the public sphere that potential clients were becoming too enlightened for their own good.[112]

The intellectual authority of the Royal Society of Medicine was all the higher, for appearing to be state-endorsed, supraregional, supracorporative, and, in the interests of both science and social utility, utterly disinterested. As such, the Society could claim an essential role as guide to the public on all health matters. Its vigorous campaign against charlatans—practitioners of any stripe who misled and endangered the life and health of the population at large—was predicated on its assumption of the patriotic defence of the public interest. Given the growing public vogue for medicine which we have traced and the demand for health services which the growth of medical consumerism and commercialism attested, the stakes were clearly high.[113]

In fact, despite its purportedly academico-scientific status, the studied neutrality which it affected, and the aura of patriotic disinterestedness which it exuded, the Society was not quite as pure as the driven snow. Its founders were shot through with personal ambitions and sectional interests, and the Society's history was to prove perennially riven with intrigue and faction. In 1776, premier physician-in-waiting de Lassone, in a letter to Vicq, referred to the group behind the Epidemics Commission—a number of aspiring Parisian physicians including Antoine-Laurent de Jussieu (1748–1836), Michel-Augustin Thouret (1748–1810), Paulet and Dieudonné Jeanroi (1750–1816),—as 'our society', and the Society never lost that air of cosy cliquishness.[114] The grouping, which until his death in 1788 Lassone shrewdly manipulated, aimed single-mindedly towards the promotion of the Society into full academy status. They neutralized premier physician Lieutaud who in the years leading up to his death in 1780 had become openly sceptical about the Society's intentions. Combining dogged assiduity with flagrant sycophancy, they vigorously lobbied and wheedled support from key public figures, ministers, and court luminaries. Their choice of associate members was particularly astute: it included powerful figures such as foreign minister Vergennes and *lieutenant général de police* Lenoir, an enthusiastic patron of public health.[115]

Things turned nasty in the complex world of medical politics from the very

[112] Hannaway, 'Medicine, Public Welfare and the State', 117 n. For the public meetings, ibid. 173. For the press, see above, Ch. 10, Sect. C. By way of example, the *Affiches du Dauphiné* carried reports of the Society's meetings and essay competitions on 9 Mar., 7 Apr., 4 May, and 5 Sept. in a single year (1781). The authoritative medical newspaper, the *Gazette de santé*, also acted as publicist and enthusiast for the Society.

[113] See above, Ch. 10, Sects. C–D.

[114] Hannaway, 'Medicine, Public Welfare and the State', 106. For the goal of achieving the status of academy, see ibid. 67.

[115] For lobbying and other behind-the-scenes activity, see esp. BN Joly de Fleury 499 (esp. fos. 194–301), 592 (16–140), and 513 (1–225).

early days. The Society's take-over in 1778 of the licensing of proprietary medicines and the control of medical waters from 1778 caused significant ripples. Since 1772 concern for these matters had passed out of the hands of the premier physician and under the control of the so-called Commission du Louvre, increasingly controlled by a medical clique headed by rival court physician Joseph Raulin.[116] The Commission was widely criticized by physicians, notably within the Paris Medical Faculty, for according too much influence to surgeons and apothecaries (who had eight and four members respectively on the Commission, alongside only eight physicians). In 1776, however, Lassone laid down a marker for the embryonic Society of Medicine by getting the tapeworm remedy of one Madame Noufflers tested and approved, and then having it publicized and circulated, with great publicistic flair, as part of an image-enhancing exercise.[117] The subsequent dissolution of the Louvre Commission and the placing of its tasks in the hands of a society of which he was life president was a striking palace putsch. Contemporaries saw it as both a personal triumph for Lassone and a major fillip to the fortunes of France's physicians. The regulatory body now marginalized surgeons and apothecaries, and was very much a coterie of physicians.

The aspect of the Society's work which amounted to the boosting of the place of physicians within the orthodox medical community should not be underestimated. Physicians' corporate fortunes had been somewhat in eclipse during the Enlightenment partly, as we have seen, through the rise of surgery and partly through the development of competition on the medical market-place from free-booting medical entrepreneurs. For most of the eighteenth century physicians had bemoaned the lack of a national collective organism which could represent their interests. There had been an abortive attempt in 1730 by Montpellier-trained Premier Physician Chirac to create an Academy of Medicine to complement plans for the establishment of the Academy of Surgery urged by his fellow Montpelliérain, premier surgeon-in-reversion La Peyronie. But Chirac's illness, then death in 1732, saw the medical project fail, even as the Academy of Surgery plan came to fruition. The Paris Faculty, which had opposed Chirac tooth and nail, had since then, for all its intellectual eminence, proved quite hopeless organizationally and politically at providing a lead.[118] Now, Lassone and Vicq not only strengthened the role of physicians at the centre—much to the predictable fury of the surgeons—but also bade fair to group physicians together nationally so as to give them their full collective weight in medical politics.

[116] The disillusion of premier physician Lieutaud in losing these responsibilities is marked in a letter from him to Juvet, 3 Jan. 1775, in Archives de l'Académie de Médecine MS 33.

[117] Hannaway, 'Medicine, Public Welfare and the State', 99. The *Gazette de santé* in 1775–6 carried much of this material.

[118] For the Chirac project, which is underresearched, see BN Joly de Fleury 1214 (fo. 93) and BFMP MS 2006. For the Academy of Surgery, see above, Ch. 9, Sect. C.

The Society seemed to be shaping up to form a single body of medicine, headed by physicians in general and the Society's leaders in particular. Lassone and Vicq lobbied vigorously to get medical faculties, colleges, and corporate bodies throughout France to accept associate membership of the Society and some thirty-five such bodies had accepted this honour by 1789.[119] The Society's prize essay competitions elicited a strong and enthusiastic response from individual provincial practitioners encouraging scientific emulation and effort within the body of the orthodox medical community throughout France. It had by 1789, moreover, received some 226 detailed reports on medical topography from provincial enthusiasts detailing local physical geography, meteorological states, current and customary diseases, diet, lifestyle, hygiene, and much else besides. Provincial practitioners flocked to receive membership of the Society: perhaps over one thousand had corresponded with the Society by the time of the Revolution, perhaps one physician in every three or four throughout France.[120] A good number of surgeons too had broken ranks and joined the Society's team. Provincial physicians appear to have responded enthusiastically in the tone of engaged collegiality with which the Society was striving to enlist their support for a common scientific (and political) project; if the Paris Faculty had ever acknowledged their existence, it was usually only to address them 'as though they were schoolchildren'. The Society's mood of relaxed chumminess, sustained by Vicq's tireless letter-writing, was more inspiring. 'There is not one of our colleagues', it was stated in the first volume of the *Histoire et Mémoires*, 'who, on arriving in the capital, does not find himself friends in our midst, who receive him eagerly and who solicit from ministers the favours for him which he deserves.'[121] Court patronage mixed with the mundane sociability of the Enlightenment public sphere as significant elements in the Society's mobilization strategy.

The aim of creating a new, massive, and somehow supracorporative medical agency attracted the Society a good deal of hostility from corporate bodies within the orthodox medical community. Surgeons and apothecaries were resentful.[122] Veterinary specialists too were hostile to the new-found power of Vicq d'Azyr, who commandeered a post at the government-sponsored Alfort school for veterinary science just outside Paris, and turned it from a training institution into being a research centre for him and his scientific cronies. The

[119] *Histoire et Mémoires*, i. 2 f.

[120] Hannaway, 'Medicine, Public Welfare and the State', 157, for the topographies; Gillispie, *Science and Polity*, 241, for the correspondents.

[121] i. 3. Avignon-based physician Esprit Calvet cannot have been alone, however, in finding Vicq's endless lecturing and self-promotion a little wearisome: Calvet to Vicq, 17 Sept. 1778, bemoaning the Society's request for annual reports from its provincial correspondents. BM Avignon 2345, fos. 9–10.

[122] For the apothecaries, see Gillispie, *Science and polity*, 211.

Society also had to resist rival medical lobbies. It sidelined premier physician Lieutaud. It successfully fought off plans originated under Necker to bring it squarely under the control of *maître des requêtes* Chaumont de la Millière in the office of the controller general, which was at that time developing a national hospitals inspectorate, with former military hospitals' inspector Jean Colombier at the helm.[123] The most formidable of the Society's opponents, however, was to be the Paris Medical Faculty, long-time centre of the orthodox medical community.

The struggle between the Society and the Faculty in the last years of the Ancien Régime had almost the status of a parable, and it provides insights into the changing nature of medicine, the transformation in public demand for health, and the structure and problems of the absolutist polity. A self-consciously modernizing body whose work was structured around the values of science and social utility and which claimed the status of national representative for all branches of medicine locked horns with the medical body which, proudly corporative and rooted in a Parisian rather than nationwide context, had throughout the early modern period been figured as the leading edge of the orthodox medical community.[124]

The way in which the Society was carving out an empire for itself—a 'single body' of medicine, in its own words—inevitably seemed threatening to the traditional prerogatives of the Paris Faculty, which had long seen itself as the 'head' of the 'body' of corporative medicine within France as a whole. The conflict was all the more extreme in that Lassone in the mid-1770s had utilized Faculty opposition to the unpopular Commission du Louvre, before dropping his Faculty colleagues like a brick as soon as he had secured support at court and in the ministries to allow him to establish the Society. Though the Faculty resented, as always, the way in which court-based posts were allowing non-Parisian graduates access to the Parisian market, it was more distressed by the fact that the leading figures in the Society clique were a score of Faculty doctors. Most were in fact rather young to boot: there was a generational dimension to the quarrels. Thus although the Society did in fact offer a number of olive-branches to the Faculty—the latter's dean, for example, was an ex-officio dignitary within the Society—the context of these concessions was viewed as humiliating and unacceptable by the Faculty's senior members.[125]

[123] Hannaway, 'Medicine, Public Welfare and the State', 173 ff. Cf. above, p. 702. For the Alfort question, see Hannaway, 'Medicine, Public Welfare and the State', 206 ff.; and id., 'Veterinary Medicine and Rural Health Care in Pre-Revolutionary France', *Bulletin of the History of Medicine*, 52 (1977), 431–47.

[124] Besides Hannaway, 'Medicine, Public Welfare and the State' and Gillispie, *Science and Polity*, Goldstein, *Console and classify*, 8 ff. provides a good oversight of many of the issues in the conflict. A good deal of documentation is to be found also in *Commentaires de la faculté de médecine de Paris (1777 à 1786)*, ed. G. Steinheil (2 vols.; Paris, 1903), which may be supplemented by P. Delaunay, *Le Monde médical parisien au XVIIIe siècle* (Paris, 1906).

[125] Delaunay, *Monde médical*, esp. 312 f. For the age and provenance factors, cf. Hannaway, 'Medicine, Public Welfare and the State', 407, 447 ff.

When the Faculty swung into open opposition to the Society in 1778, it based its arguments on the solidest of corporative grounds: the Society was a 'dangerous novelty' whose existence trampled on the established and legally endorsed privileges of other corporative groups, the Faculty not least. Faculty spokesmen made much of the fact that all the functions which the Society was assuming were already within its own purview—bar one. The exception was correspondence with provincial physicians, but the Faculty lacked the resources to engage in this. It prided itself on having the right to authorize drugs and medicines; to assess the quality of mineral waters; and to send out emissaries and commissioners for epidemics and for *ad hoc* problems in public health. The Society appeared, the Faculty held, to want to establish a teaching practice to boot, which contravened the Faculty's rights in this domain. (This was probably a reference to Vicq's private anatomy lessons held from 1775 to 1777.) Above all, the Society was utilizing its association with the crown to set itself up as a legitimizing body in medicine throughout the realm: it 'appears to believe itself to be authorized to pronounce as a tribunal on theory and practice ... it would regard itself as the arbiter of progress of the art [of medicine], the enlightener of the Prince, of the magistrates and of the Nation ...' All such functions the Faculty believed itself empowered to hold: the Faculty was 'the tribunal of the nation for everything concerning medicine', and the Society was wrong to aim to be 'a second tribunal of medicine in the capital, existing under ministerial authority'.[126]

The Faculty expressed itself willing to negotiate with the Society and to consider reforms: 'but this reform will not affect the faculty as tribunal'.[127] It used the affective language of maternity to express its wish that the young and misguided doctors from its own ranks who dominated the Society would not harm their 'mother'. To do so would be 'unnatural' and a blow against the corporative order of things and the Great Chain of Being. The Faculty also highlighted the egalitarian aspects of corporative life to contrast with the hierarchical organization of the Society: all doctors-regent were equal (Faculty spokesmen must have had their tongue in their cheek at this moment), whereas the Society was dominated by premier physician Lassone, who was the Society's president for life, who seemed to be grooming his own son for the succession, and who was modelling the role of royal physician on the Protomedicus of Austria and other states in which the premier physician had sweeping prerogatives.[128]

The Faculty deployed a range of weapons against its new rival. It lobbied at court, though Lassone was pretty well defended from that angle. It pressurized its members to stay loyal to their collective 'mother', and the Society did suffer a number of defections. It used its legal prerogatives to harass the younger mem-

[126] *Commentaires*, ed. Stenheil, i. 193, 168 f., 107 f. [127] Ibid. 107.
[128] For European comparisons, cf. above, Introd., Sects. B–C.

bers of the Society who sought to practise in Paris as faculty graduates. It also began to develop many of the procedural styles of the Society: holding public meetings, making a fuss about public health consultancies, publishing eminent papers, even making overtures for the first time to provincial physicians. At one stage in 1778 it came close to declaring a strike of medical care, until brought into line by the keeper of the seals.[129] Most tellingly perhaps, it took the struggle onto the terrain of the public sphere, launching a vicious pamphlet war against the Society, representing itself as 'the oppressed' and the Society as 'oppressors' and cruelly satirizing the Society's leading lights—Lassone, for example, as a 'Cromwell', Vicq as a 'crafty Norman'.[130] Foolishly perhaps, the Society was able to use its influence with its 'associate member', Paris *lieutenant général de police* Lenoir, to imprison in the Bastille a Faculty pamphleteer who had attacked the Society a little too roundly. This might have signalled the Society's strength within the state. But it was a dangerous manœuvre in regard to public opinion, since it could easily be represented as a flagrant example of 'ministerial despotism'.[131] In the battle between Faculty and Society were thus conjoined questions of political power as well as of scientific authority.

E. The Royal Society of Medicine and Quackery

The importance of the issues at stake in the polemical struggle between the Paris Medical Faculty and the Royal Society of Medicine were particularly evident in one of the key questions on which battlelines were drawn, namely the Society's claims over the policing of mineral waters and proprietary medicines. In his self-appointed role as the scourge of medical charlatanism, Society secretary Vicq d'Azyr viewed controlled scientific testing as a means of keeping the health of the public from untoward harm. He could with ease invoke the burgeoning critique bewailing the damage that unlicensed medical practitioners caused the wider public.[132] A new, more stringent system of authorization exemplified a determination to regulate and sanitize the provision of drugs and remedies within society which formed a key component in his more general crusade against charlatans. The Society produced updated lists of proprietary remedies which it had rejected—these were widely

[129] Besides Lieutaud, Bouvard, Maloët, Paulet, and others detached themselves from the Society in the early years. For the would-be 'strike', see Delaunay, *Monde médical*, 312 f.

[130] See esp. *Nouvelle chanson sur un air vieux* (n.p., n.d.) for these epithets.

[131] Hannaway, 'Medicine, Public Welfare and the State', 513. See ibid. 401 ff. for the whole rivalry issue. The Library of the Academy of Medicine contains a bound volume of some dozen pamphlets from this 'pamphlet war', several of which are cited here and below. For the language of 'ministerial despotism', see K. Baker, *Inventing the French Revolution: Essays on French Political Culture in the Eighteenth Century* (Cambridge, 1990).

[132] See above, Ch. 10, Sect. D.

reproduced in the medical and provincial press.[133] Indeed, writing in 1790, Vicq claimed that the Society had given its approval to only four proprietary remedies, and rejected 800 others.[134] This figure, designed to show how little of value was to be found within the ranks of medical entrepreneurs, was in fact entirely and wholly erroneous, as we shall see. The workings of the Society in the last decade of the Ancien Régime suggest a mode of operation which was at once far less heroic, less Manichaean, less pristinely pure, and more complex than its propaganda would suggest. Just as Lassone had attracted criticism for making a good deal of money from the 'scientific' *boîtes des remèdes*' service, so the Society would become the target of scurrilous attack for mixing science with personal profiteering. The character of the political system would moreover reveal itself inimical to the modernizing project of the Society and its sponsors.

Part of the problems which the Society had to face in this sphere derived from the fact that, for all its court connections and ministerial support, it could not possibly undo the pre-existing web of privilege and private interest which was spread throughout the polity, and which extended tentacularly into the domain of proprietary medicines.[135] It did not enjoy a *tabula rasa* on which to perform its regulatory functions, but had to accept existing, legally enforceable rights of manufacture, sale and monitoring of proprietary medicines. Within Paris, for example, the Society had to compete against a number of other authorizing bodies, including the Faculty.[136] Royal letters patent—the most elevated form of legitimation available—meant that a handful of remedies lay completely outside the Society's regulatory scope. By the last decade of the Ancien Régime, there were five medicines privileged in this way: *orviétan*, which had now passed from the hands of Parisian doctor-regent Charles Dionis to the Parisian spicer Regnard; two mercurial treatments for venereal disease, the *poudres d'Ailhaud* and the *remèdes anti-vénérien* of Agirony, authorized in 1769; and two less striking concoctions, the *pâté de guimauve* of Demoiselle Guy, approved in 1746 and the Montpellier-produced *eau de Comère* which had received authorization in 1779. Besides these, the Society also had to respect the approval given a number of remedies between 1772 and 1778—usually only, however, for a limited period—by its predecessor, the Louvre Commission: the Society's papers listed sixty-

[133] e.g. *Affiches du Dauphiné*, 8 Oct. 1779; *Bibliothèque physico-économique instructive et amusante* (1784), 217 ff.

[134] Vicq d'Azyr, 'Idée générale de la médecine', in id., *Œuvres*, ed. J.-L. Moreau de la Sarthe (6 vols.; Paris, Year XIII [= 1805]), v. 56. Of the four remedies, Vicq claimed only two were new. Cited as if true by Gillispie, *Science and polity*, 219.

[135] Needless to say, the Society was not alone in this predicament, which was found throughout the polity.

[136] See above, Ch. 10, Sect. B.

one such remedies, the property of fifty-four individuals, three of whom had received their authorization as recently as 1777–8.[137]

The Society, though obliged to allow privilege-holders to persist unmonitored and to wait on the expiry date of authorizations from the Louvre Commission, rejected far more proprietary remedies than it approved. Vicq d'Azyr was gilding his own anti-charlatanesque lily, however, when he retrospectively claimed that there were only four such authorizations. Full endorsement was in fact given to twelve medicines: three venereal treatments (the *rob* or syrup of Laffecteur, Royer's enemas, and the Belloste Pills); three skin treatments (Champagnac's anti-scabies pommade, the abbé Quiret's remedies against the itch, and Holtzer and Company's Anti-Scorbutic Beer); and a motley collection of other preparations (Dino de Stephanopoli's *coraline de Corse*, the melissa cordial (*eau de mélisse*) of the Carmes Déchaussées, abbé Le Noble's medical magnets, De Weisse's *Remèdes contre le lait répandu*, Jacquet's antimonial cream, and the *chocolat de santé* manufactured by the Lyonnais businessman Thevenet).[138]

Although the Society usually insisted that the products it authorized should where appropriate be sold through a registered apothecary, it did not restrict its approval, as the above lists show, to the products of trained medical practitioners. This was even more the case with the substances and treatments to which the Society accorded its 'tacit permission'. This system of according tacit permissions to substances which could not be proven to be harmful but on whose medicinal utility it reserved its position was clearly based on the well-tried system of book censorship.[139] Like that, it was a response to the tidal wave of products with which the state was faced, and an acknowledgement that, in an increasingly commercial society in which public opinion was growing in strength as a legitimizing agency, it would have been impractical, unpopular, and probably counter-productive to insist that only authorized products should find their way onto the marketplace. Until 1782 eight of the substances accorded tacit permissions were for sticking-plasters (*taffetas dit d'Angleterre*), and most of the others had some cosmetic aspect: there were seven rouge products and about as many for other kinds of face and skin preparations. The list was completed by a diversity of fashionable and faddish commodities—coffee and tea products, *biscuits stomachiques*, Beauqueton's wig-glue—and old favourites, such as the Blois liquorice juice (*jus de réglisse de Blois*) of the nuns who ran the Hôtel-Dieu in Blois. All in all, Vicq's proud boast that the Society had acted

[137] ASRM 107 d.1. For *orviétan* and the other patented drugs, see C. S. Le Paulmier, *L'Orviétan: Histoire d'une famille de charlatans du Pont-Neuf aux XVIIe et XVIIIe siècles* (Paris, 1893) and above, Ch. 4, Sects. A–B.

[138] ASRM 107 d.1. For the *rob Laffecteur*, see below, p. 776.

[139] For 'tacit permissions' in the book-trade, see Roche, 'Censorship and the Publishing Industry', 9 ff. Helpful too is the discussion in R. Chartier, *The Cultural Origins of the French Revolution*, Eng. trans. (Durham, NC, 1991), 38 ff.

effectively to reduce the domain of medical charlatanism looks like a myth. Its own archives suggest that it approved ten remedies and gave tacit permission to thirty more in a four- to five-year period up to 1782; the Louvre Commission had authorized sixty-one in the seven-year period from 1772 to 1778. Up to the Revolution, according to another estimate, the Society gave 100 authorizations in total and rejected 342 substances.[140]

If the corporative nature of the Ancien Régime polity was an inhibiting factor on the ambitions of the Royal Society of Medicine, so too was the task of legal enforcement. The Society encouraged both its provincial and Parisian correspondents to act as informers, providing denunciations of practitioners advertising and selling unauthorized products. In 1783 the keeper of the seals agreed to add the Society to its list of official censors on all writings concerning medicine (though in practice he often forgot to consult them).[141] Paris's 'Quack Street' was in any case more than a little recalcitrant to medical policing. Vicq d'Azyr collaborated closely on this with Patte, the police commissioner of the *lieutenant général de police* responsible for 'la police des empiriques'. Yet the two found they had met more than a match. Many 'charlatans' either refused to appear when summoned, or else refused to divulge their secrets. Many chose to take flight from Paris, or prudently to lie low during this wave of police surveillance. Several stated they no longer practised medicine. A good number had seen all this before: the quack Molenier, for example, had been repeatedly prohibited from selling his anti-rheumatismal balm between 1762 and 1776, while Guimoneau had signed police statements to the effect that he would renounce the sale of his Calabasse syrup in 1773, 1775, and 1778.[142] Some, moreover, could claim to be well connected. They quoted royal authorizations in their favour (most of which had, it was true, formally elapsed), or else cited other prestigious patrons: the minister Amelot, the prince de Condé, and so on. Bringing Quack Street within the legal symmetries of medical police thus proved intensely problematic.

What was true in Paris, moreover, was true of the provinces. Unlicensed medical entrepreneurs of every stripe showed themselves endlessly guileful at finding the weak points in the repressive arsenal launched against them. The royal edict giving the Royal Society of Medicine its letters patent had not been prop-

[140] The last statistic is drawn from Hannaway, 'Medicine, Public Welfare and the State', 287. For other statistics, including information on the Louvre Commission, see ASRM 107 d.1. The 'myth' of the efficacy of the Society is clearly endorsed by Roy Porter who, basing himself on the work of Matthew Ramsey, contrasts the 'free field' in quackery in England with the 'highly-regulated' state of late 18th-cent. France: id., *Health for Sale: Quackery in England, 1660–1850* (Oxford, 1988), esp. 21–2, 27.

[141] Académie royale de Chirurgie d.3 (ASRM, misplaced in this archival deposit, located, like the Society, in the present-day Académie de Médecine); Hannaway, 'Medicine, Public Welfare and the State', 303 f.

[142] ASRM 107 d.1; Académie royale de Chirurgie 4 d.3.

erly registered in several provincial *parlements*, so that when Vicq d'Azyr tried to mobilize local police and municipal authorities against charlatans he often met with blank incomprehension of the law of the land.[143] Even full compliance and cooperation with the precepts of medical policing were usually limited in space. A zealous mayor or police official might drive a troupe of charlatans out of town but there was usually another town to visit close by which lacked such zealous contributors to the anti-charlatanism crusade.

The sale of *orviétan* was a keenly felt thorn in the Society's side. From the vantage-point of someone like Vicq d'Azyr, a belief in the power of *orviétan* looked like the very quintessence of a reprehensible popular culture, and those who took the drug, sad dupes of unscrupulous charlatans. In fact, as we have seen,[144] the conditions of the sale of *orviétan* had been modernized in the middle decades of the century, so that its availability was probably more widespread within French society than at any other time, while its legal status effectively ring-fenced the vendors of the drug from the attacks of the Society in the eventuality of prosecution. *Orviétan*-sellers were able to utilize the stratagem of referring their case to the Prévôté de l'Hôtel du Roi as a means of shaking off legal harassment or routine policing—and some got rather hoity-toity about their prerogatives. Chevalier Algaron, *dit* Toscano, 'seigneur de la Bevière en Bresse', even entered into the spirit of the *Zeitgeist* enough to attack charlatanism himself, solemnly warning the public against individuals who claimed to be his associates, 'for the public would be misled by these charlatans who seek to dupe by saying they carry privileges, while the said *sieur* Algaron proves that he is the only such holder of a privilege from the king of France'. When this claim met with a challenge, he was able to point out that when his licence for the sale of *orviétan* had been endorsed at Versailles, it was stipulated that 'it is prohibited for any physician, surgeon, apothecary, operator, or any other person to disturb or upset him in the exercise of his warrant'.[145]

The fact that individuals like this seemed to have immunity from routine medical policing was all the more galling to the Society in that they invariably, it was complained, went beyond their licence for the sale of *orviétan* and retailed a whole array of other unlicensed remedies. As the distraught mayor of Barjac in Normandy, harassed by itinerant charlatans, wrote to Vicq d'Azyr in 1781, 'the sale of *orviétan* is merely a pretext to permit the manœuvres of this sort of person'.[146] The triumph of *orviétan* had indeed been achieved just as medicines came to be publicly rated according to novelty rather than traditional utility: so even this erstwhile wonder-drug had to suffer the slings and arrows of

[143] See e.g. correspondence at ASRM 107 d.1; and 199 d.1 (for Alsace), and d.14 (for Cambrai).
[144] See above, Ch. 10, Sect. D.
[145] ASRM 199 d.25 (Picardy). For a similar case, see ASRM 199 d.23 (Vendôme, 1786).
[146] ASRM 199 d.23. Cf. ASRM 199 d.1 (for Burgundy).

outrageous fashion. Charlatans played down the very use of the term, preferring drug titles with less archaic connotations or which sounded more fashionable, such as the *eau orviétale essencifiée* offered in Rouen in 1771. Otherwise they proffered concoctions which keyed in with current medical preoccupations such as eye disease, venereal complaints, and even the vapours.[147] They also, it was claimed, presented old remedies as new, falsified remedies so as to make them cheaper, extended a given remedy to cover a whole range of conditions, and often handed over the actual cure to their underlings. This was part of a more general tendency to adopt the style, and some of the sharp practices, of commercial society. They now spoke the language of print, rather than (or as well as) oral culture, boasted of spells of training with medical and surgical luminaries, endlessly invoked service of the public, took on phoney titles, and engaged in other fashionable gestures such as offering free treatment for a limited number of paupers, according to the precepts of modish *bienfaisance*.[148]

Medical entrepreneurs outside the corporative medical community were also in general often successful, as their more learned betters ruefully had to admit, in appealing to the opinions of their clients. There were, physicians irkedly noted, certain hallowed prejudices about the maintenance of health which were difficult to shake off, such as the value of a good purge. The people like a good 'flushing out of its bowels', it was acknowledged, while the physician Fourcroy at Clermont-en-Brie mentioned how a visiting charlatan and his troupe in 1786 had distributed large numbers of free helpings of their purgatives 'which make people go to the privy twenty-eight or thirty times which the peasants find quite admirable'. Physicians still utilized purgatives of course: but this kind of overkill was reprehensibly indiscriminate—and probably dangerous.[149]

The correspondents of Vicq d'Azyr were habitually scornful of such 'popular' prejudices—yet to call them popular would be to imply that none of the middle and upper classes had them, which was manifestly not the case. Indeed, the difficulty the Royal Society of Medicine had in its policing activities owed as much as anything to the fact that the medicine of the putative charlatan attracted the custom not only of the people but also of the middling sort and the élite—including, indeed, individuals within the policing agencies of the state. The enclave status of princely houses such as the notorious Palais-Royal in Paris, or the German-owned seigneuries in Alsace allowed a good deal of business to be

[147] For the Rouen case, see *Affiches de la Basse et Haute Normandie*, 6 Sept. 1771; for vapours, see ASRM 199 d.29.

[148] Cf. above, Ch. 4, Sect. A. One apparent quack, Engleberme, cited training with the venereologist Thomas Goulard at Montpellier, another claimed to have worked with the Montpellier professor Fizes: ASRM 199 d.1, d.9. For the range of underhand practices, see a complaint from Chartres in 1778: ASRM 199 d.23.

[149] ASRM 199 d.19. This appears to have been the physician, chemist, and future Conventionnel Antoine Fourcroy, proponent of medical schools in 1794. See below, pp. 818–19.

conducted under the formal protection of *les Grands*.[150] Even where the formal writ of the law ran, moreover, there could be problems. Minister of the *maison du Roi*, the baron de Breteuil, was primed by Vicq to order the subdelegate of Béziers to stop a certain widow, *veuve* Coustol, from selling a totally unauthorized tisane as a medicinal substance. In reply, the subdelegate expressed his unwillingness to do so on the grounds that the tisane had proved to be good for 'purifying the blood' and as a cure for venereal disease.[151]

Municipal and other local authorities also often refused to harass or prosecute charlatans precisely because their popularity suggested that they were performing a valued public service; this seems to have been especially the case if the practitioner was enterprising enough to mix an appeal to hallowed prejudice with a taste for current fashion. This emerged clearly in the case of one Constant Chiarini, an itinerant showman in his thirties who travelled with an accompanying troupe of tightrope walkers, and who was denounced to the Royal Society of Medicine for journeying around Languedoc selling an allegedly medicinal substance, which turned out on analysis to be nothing more than vegetable water. Chiarini had been arrested at Aubenas and although he claimed he had received the society's authorization, under questioning it transpired that he had merely given a bribe of 66 *livres* to Vicq d'Azyr's valet! For a strolling player, Chiarini proved to be pretty well connected. His mother supplied the intendant of Languedoc with a certificate of approval from premier physician Jean Sénac dated 1770 (and therefore hopelessly out of date), a document from the dean of the Perpignan Medical Faculty permitting her son to sell his goods throughout Roussillon, and permissions dated 1786 or 1787 from a mighty host of medical practitioners, municipal officials, seigneurs, and magistrates from towns all over the Midi including Grenoble, Gap, Sisteron, Nîmes, Joyeuse, and Aubenas.[152]

Given, then, the political and institutional matrix of Ancien Régime society, where privilege was defended by law, given the continuing insouciance of many local authorities, and given the growing power of the medical consumer, the Society's attempts at regulation could not do away with the peddling of harmful medicines. It would be easy to conclude that the Society's efforts at medical policing of the market-place for proprietary remedies and services by unlicensed practitioners were a signal failure. Certainly there was a massive gap between theory and practice, intention and achievement. Yet there is another dimension to the Society's involvement in the campaign against medical charlatanism which deserves emphasis; namely, the impact of the efforts of medical policing in stimulating the play of the medical market-place and influencing the languages of commercialism.

[150] For *maisons royales*, see ASRM 107 d.1; and for seigneuries, ASRM 199 d.3.
[151] AD Hérault C525. [152] Ibid. C142.

The Society tried hard to restrict the uses and the contexts for use of its approval of new remedies. *Brevets* were awarded only for a three-year period and were renewable; the Society set the price of the substance; and it only allowed publicity to cite the exact wording of the Society's approval.[153] Yet in the profusely commercializing conditions of the late Ancien Régime, the Society could not control all uses to which their approval (or claimed approval) were put. Individuals who received either open endorsement or tacit permission from the Society were soon vaunting that fact in the forefront of their sales pitch.[154] But this new currency of medical authority was soon being pirated and counterfeited: the Society had to struggle to keep its name off the publicity of Faynard's haemorrhagic powders or Faure de Beaufort's *eau anti-putride*.[155] In the Dauphiné, it was reported that even peasants were claiming the Society's approval for engaging in their crude rustic quackery.[156]

One of the firms most keen to use the Society's endorsement to pump up custom were the manufacturers and retailers of the anti-venereal treatment, the *rob Laffecteur*. The remedy seems to have originated in the early 1760s as the brainchild of Pierre Boyveau and war ministry clerk Denis Laffecteur.[157] Clinical trials at Bicêtre in 1776 led to the award of a state endorsement. However, the substance was much contested in a field—venereal diseases—which was always open to dispute. The claim of the manufacturers that the *rob* was a solely vegetal, non-mercurial treatment won it an enormous amount of popularity but also a good deal of distrust. Accusations that the first tests had been fixed in some way led the Royal Society of Medicine to arrange for a new set of trials, performed this time with the greatest possible care to avoid substitutions or trickery. The final endorsement by the Society on 20 April 1780 ensured the fortune of the manufacturers. They were soon claiming to have 150 sales points throughout the kingdom, and were also provisioning the navy (they added the army to their clients during the Revolution).[158]

A drug such as the *rob Laffecteur* could not fail to have as much failure as success in its therapeutic record, especially given the nature of the venereal diseases which often accord periods of remission. Though this was more a reflection of

[153] Cf. Hannaway, 'Medicine, Public Welfare and the State', 297 ff.

[154] See e.g. publicity for Jacquet's antimonial cream in the *Journal littéraire de Nancy*, 8 (1782), 100; and *Journal Général de France*, 17 Jan. 1784.

[155] For Faynard, see e.g. the *Affiches des Trois-Evêchés*, 20 July 1783, and M. Bouvet, 'Les Commissions de contrôle des spécialités pharmaceutiques au XVIIIe siècle', *Bulletin de la Société d'histoire de la pharmacie*, 35 (1922), 124; and, for Faure, ASRM 199 d.9.

[156] ASRM 199 d.13.

[157] See M. Bouvet, 'Un remède secret du XVIIIe siècle: Le Rob Boyveau-Laffecteur', *Bulletin de la Société d'histoire de la pharmacie*, 4 (1923); and above, p. 771.

[158] There is a good collection of pamphlets on the substance dating from the French Revolution but containing historical material in BL FR430. See also Hannaway, 'Medicine, Public Welfare and the State', 291 ff. The *rob Laffecteur* was one of the most frequently advertised drugs in the last

the state of medicine than the bad faith of the Society in offering its endorsement, the fact remained that the Society's authorization was far from constituting a necessary guarantee of medical quality. This problem was evident in other ways too. A certain Mathis was denounced to the Society from Bordeaux in 1784, for example, for selling 'anti-venereal enemas': 'we cannot believe', the correspondent noted in his letter to Vicq d'Azyr, 'that he has obtained a privilege from you, since these enemas do not fulfil the expectations of the public'. Yet Vicq had quietly to admit that the individual was indeed protected, and three years later Mathis was reported as claiming full endorsement from the Society, and having a signboard hanging outside his residence inscribed 'Privileged Physician for Venereal Disease'.[159] A similar charge came from the physician Jean-Louis Bagot (1728–94) of Saint-Brieuc, who was astonished to find that an illiterate and immoral good-for-nothing parading his wares on a public stage was advertising a remedy for which he had a warrant from the Royal Society.[160]

In cases like this, the valencies were suddenly and dramatically reversed, and the Royal Society of Medicine was metamorphosed into the Royal Society of Medicine and Quackery. The would-be champion of medical policing became a gang of unscrupulous entrepreneurs, and the scourge of charlatanism, the refuge of quacks. The Society's secretary, that white knight of scientific altruism, took on the colours of a corrupt courtier and the puppet-master behind all the charlatans of France. The professors of the Montpellier Medical Faculty indeed specifically dissociated themselves from the Royal Society of Medicine in 1782 on the grounds that its own licensing system for itinerant medical entrepreneurs was preferable to the Society's, which seemed to allow all sorts of riff-raff to practise unchecked.[161]

The knots into which the Society seemed to be tied over cases like this were made even more difficult because of the context in which it was operating. As we have pointed out, despite its scientific aura, the Society had been created as part of a court coup led by arch-medical politician Joseph de Lassone, and its internal affairs were riven by faction. Lassone commandeered funds from the central government so that, to the indignation of the penniless Paris Medical Faculty, members of the Society benefited financially from their adhesion: pensions were paid to all associates—a score of pensions were handed out in 1786 for example—while expenses were also provided for members who attended the Society's meetings or who engaged in missions and committee work for it. Accounts were always a problem, despite secretary Vicq's reputation for spotless integrity.[162]

The control over the mineral-water trade which the Society secured in 1778

decade of the Ancien Régime: see, over a brief period of the *Affiches du Dauphiné*, 8 Sept. and 29 Dec. 1786, and 1 June and 21 Sept. 1787 and 29 Feb. 1788. See also L. W. B. Brockliss, 'Making a Killing out of the Nation in Arms: Marketing a Venereal Therapy in the 1790s', unpub. paper.

[159] ASRM 199 d.18. [160] Ibid. d.29. [161] Ibid.

[162] See above, Ch. 10, Sect. D, and Gillispie, *Science and polity*, 224 and n. 132.

was also significant here. This lucrative source of income had made the fortune of many premier physicians, the notoriously venal Jean Sénac not least. As a result, the president of the Society, whose entrepreneurial flair as regards the *boîtes des remèdes* was already a matter of much public comment,[163] had his feet planted in a pretty sizeable mound of patronage and clientage—and possibly of corrupt self-enrichment too, since although the granting of licences to retail mineral waters were supposed to go through the books, auditing procedures were primitive in the extreme. Under the aegis of the Society, the number of distribution centres for mineral waters grew from a score in 1778 to forty-nine by the eve of the Revolution; and the value of income from the retailing and licensing operations amounted to some 23,000 *livres*.[164]

The boom in medical entrepreneurialism which we delineated in Chapter 10 thus seemed by the 1780s to be as evident at the heart of the orthodox medical community in this ultra-modernizing project as in the medical penumbra. 'We cultivate mineral waters', a satirical pamphlet has the Society's members saying, 'and we force the charlatans to be ... pack-animals made for drawing the chariot of our greatness.'[165] 'The cupidity of charlatans' was 'the pecuniary basis of the society'.[166] Lassone, 'the mother and father of the Royal Society of Medicine', claimed another pamphleteer, was by extension 'the mother and father of French charlatanism', and had ambitions to be the dictator of medicine throughout France.[167] This corrupt courtier had granted Laffecteur a *brevet* solely as a means of his own enrichment, while of the score of key figures in the Society, more than half were personally recognizant to or financially dependent on him as relative, pension-holder, or investor in mineral waters or proprietary medicines.[168] As a result of his activities—and notwithstanding the claims of scientific neutrality affected by the Society he headed—physicians now rubbed shoulders, satirists claimed, with every kind of crook, charlatan, and medical pleb:

> ... tout Jongleur, Bateleur, Charlatan,
> Homme à secret, Vendeur d'Orviétan,

[163] See above, Sect. A.

[164] P. Muller, 'Les Eaux minérales en France à la fin du XVIIIe siècle', Mémoire de Maîtrise, Paris-I, 1975, p. 153; Hannaway, 'Medicine, Public Welfare and the State', 139. The policing of the mineral-water trade was theoretically in the hands of a subcommittee of the Society: see its minute-book, BFMP MS 2220.

[165] *Lettre d'un sociétaire pensionné à un correspondant de province; Écrite le jour même de l'installation de la Société royale de Médecine* (n.p., 1778), 5.

[166] *Dialogue entre un citoyen et un docteur-régent de la Faculté de Médecine de Paris, sur la Société royale de Médecine* (n.p., n.d.), 10.

[167] *Lettre de M. D'Eslon ... à M. Philip* (The Hague, 1782), 68. (This letter was written at the height of the mesmerist scandal and reflects the growing antagonism towards the medical establishment at that time. Deslon was a leading disciple of Mesmer: see below, p. 786.) See too *Dialogue entre un citoyen*, 17 f.; *Lettre d'un sociétaire pensionné*.

[168] *Lettre à M. de Lassone* (n.p., n.d.), 1 ff.

Coupeur de Cors, Prévôt d'Anatomie,
Faiseur de Baume, Opérateur, Châtreur,
Baigneur, Major, Renoueur, Herboriste,
Tondeur de Chiens, Maréchal, Ecorcheur,
Italien, Guérisseur de Vérole,
(Et) ... tous Forbans de la salubre École ...[169]

These polemics over quackery which spared neither the Faculty nor the Society—in a France still subject to harsh censorship of course—seemed to show that there was no social locus within the orthodox medical community which could operate as a source of uncontested medical legitimacy. The Paris Medical Faculty, for all the variegated and dynamic contributions of its individual members, had been collectively challenged both by the rise of surgery and by the emergence of the Royal Society of Medicine. The surgeons had not yet the esteem nor the intellectual achievements to supplant the physicians. Corporatism no longer seemed enough. But the alternative, the Royal Society of Medicine, could all too easily be represented as a nest of charlatans or a gang of corrupt courtiers. A body, therefore, which claimed recognition as the prime locus of medical legitimacy, scientific neutrality, and professional values was widely represented as a sordid racket, which typified a corrupt court and which was plugged into the booming medical market-place.

F. The Politics of the Pathogenic Environment

The new, rational, humane medical establishment which the Royal Society of Medicine had purported to embody, failed dismally to police the new medical entrepreneurship, which was firmly entrenched in the medical world by the eve of the Revolution. Nor could Vicq and his colleagues avoid criticism of their powers from developing into a more generalized critique of medical authority and legitimacy. These had, of course, been challenged at a number of other moments in the Ancien Régime—the rise of Paracelsianism in the sixteenth century had been a case in point. What was crucial in the 1780s was less the novelty of a challenge mounted by a vibrant medical penumbra than the fact that it coincided, first, with a major epistemological shift taking place in medical science; second, with major restructurings within the corporative medical community; and, third, with a more general critique of the institutions of the absolutist polity, the court not least. To be credible within the public sphere, a body like the Royal Society of Medicine would have had to establish utterly

[169] *Mr. T. ... D'O. ... à M. le Doyen et à ses respectables confrères* (n.p., n.d.), 2 f. Trans.: 'every trickster, tumbler, charlatan, man with a secret, *orviétan*-seller, corn-cutter, anatomy-helper, balm-manufacturer, army lackey, bone-setter, herbalist, dog-hairdresser, farrier, flayer, Italian, pox-curer, and ... all buccaneers of the salubrious Faculty'.

impeccable credentials for devotion to the public interest and utility and to shun any semblance of accommodation with private interest and personal enrichment. The litmus test was the Society's (inevitable) failure to cut the moorings which linked it to the court, that viper's nest of secret machinations, shut off from the broader society. The Society's appeal to enlightened public opinion thus ultimately had a boomerang effect: a body which had set out to be supra-corporative and disinterested was hoist by the petard of court corruption.

In the last years of the Ancien Régime, moreover, the developing critique of the court frequently borrowed the languages of bodily ill health to score its most telling points. We see this particularly clearly in Louis-Sébastien Mercier's marvellous, multi-volumed depiction of pre-Revolutionary Paris, *Le Tableau de Paris* ('The Picture of Paris' (1782–8)), a Trojan Horse of anti-absolutism. The city of Paris was for Mercier 'a wen on the body politic', a pathological excrescence which urgently called for care and attention.[170] Mercier's sensitive nose twitched in distaste wherever he walked in the capital: in streets where butchers and slaughtermen engaged in their trade in full view; in 'filthy and disgusting' market-places; in coffee-houses, so many fetid and stinking hell-holes; in churches, full of a 'cadaverous odour'; in hospitals, 'these eternal temples of despair'; in public parks, full of 'shitters' (*chieurs*); in the homes and staircases of the poor, asphyxiatingly befumed and squalidly stinking of human waste and animal droppings.[171] The very water Parisians ingested was drawn from the Seine, itself the receptacle of stinking street mud, industrial effluent, domestic waste, animal and human limbs and remains, and much else besides. No wonder that Seine water—belying the adage that it had 'sprung from an angel's thigh'—was reputed to cause diarrhoea in all who tasted it.[172] Such, however, was the shortage of sanitary arrangements in the city that the sick person's faeces would probably end up in the river, despatched by an insouciant chamberpot. In a wonderful passage, which may be read as a pastiche of the scientific aspirations of the Royal Society of Medicine, and which was devoted to the practice of male Parisians relieving themselves on the banks of the river, Mercier proposed that newspapers, which had begun to carry meteorological reports based on scientifically calibrated observations, should also provide data on the 'state of the quays': that is, the condition of the collective bowels of the capital's inhabitants.[173]

Mercier's bravura chiaroscuro depiction of Paris—at times less *fin de siècle* than *fin du monde*—certainly has its moments. The capital of France, the centre of exchange, was the locus of a noxious circularity generating disease. The 'populous and corrupt city' was full of 'secret poisons' which gave it 'the rest-

[170] *Tableau de Paris*, i. 16.
[171] Ibid. See also esp. i. 126 ff., 140 ff., 227 ff.; vi. 1 ff.; vii. 225 ff.; and xi. 54 ff.
[172] Ibid. i. 18; cf. i. 140.
[173] Ibid. vii. 226. For the *Journal de Paris* and its weather reports, see above, Ch. 7, Sect. E.

lessness of sickness and the convulsions of death'. Symptoms of social morbidity were ubiquitous: the arrogant values of courtly Versailles challenged the workaday virtues of the capital; extremes of wealth were everywhere to be seen; the endless pettinesses of corporative life affronted freedom of thought and action; the 'natural' boundaries between the sexes seemed blurred and indistinct, as women forsook domestic bliss for public frivolity and exposure; and state power revealed itself in arbitrary and indefensible forms, with *lettres de cachet* and administrative internment prodigally overused, critical writers remorselessly hounded, and the Parisian police interfering arbitrarily within the hallowed arena of domestic life.[174]

The variegated and extreme forms of social behaviour to be found in the city which Mercier depicts were roundly condemned by contemporary moralists and seemed to be particularly associated with the big city, which was increasingly viewed as the site of pathological social and demographic behaviour. Yet Mercier's 'picture of Paris' was neither a uniformly black nor an unrelievedly pessimistic vision. 'To denounce abuses', he noted, was 'to prepare their ruin.'[175] The city seemed to contain within itself the bases of social progress and the advancement of human happiness. It was the home of much domestic comfort; it was the lively foyer of intelligence and wit; and it buzzed with an optimistic and utilitarian energy. Versailles was in contrast merely a 'satellite' round a 'whirlwind'.[176] Energy and circulation were the hallmarks of a basically sound constitution. France, like Paris, had 'a robust and vigorous temperament' which had successfully resisted numerous attempts by incompetent physician-politicians to ruin it.[177]

For Mercier—and in this he was fairly representative of other contemporary social and political commentators—the aberrant social forms which compromised the city's penchant for bringing societal happiness were seen not as the immoral and sinful acts of given individuals so much as the regrettable consequences of faulty and defective social, economic, and political organization. In a characteristic, late Enlightenment shift which we have already noted in medical theory, the political and moral focus was trained away from the carriers of sickness towards their environment. The bizarre, unnatural, and aberrant acts which took place within it had to be understood, Mercier argued, in the context of, first, a poisoned environment and, second, individuals and agencies who were responsible for the poisoning. The chief culprits were those who

[174] We are drawing generously from Mercier's well. For some helpful general views on Mercier as urban and social analyst, see D. Roche, *People of Paris*, 44 f. An important theme in the analysis was the comparison of Paris with a freer, more materially secure and more reasonable London: see e.g. *Tableau de Paris*, viii. 250 ff.

[175] *Tableau de Paris*, i. viii.

[176] Ibid. iv. 548. For a more general view, see too x. 1 ff.

[177] Ibid. vi. 147 f.

obstructed that sane circulation on which political health was based: 'obstruction, both politically and physiologically, produces death', he noted.[178] The combination of court favour and business speculation, which Mercier bundled together under the term *finance* was deadliest of all: it was a 'tapeworm which enervates the body politic. The worm absorbs the main juices, provokes false hunger, and finally kills the breast which contains it.'[179] Courtiers, speculators, monopolists, favourites, unscrupulous holders of privatized services—these were the enemy which, for the sake of the health of the body politic, should be flushed out. The best remedy was a plentiful dose of freedom—freedom to think and to trade: a life of 'honest and precious liberty' was 'the dearest attribute of any citizen'.[180] Then again, following the metaphorical equation between the body politic and biological, Mercier noted, 'freedom and health are reciprocally linked: the caged nightingale is more subject to illnesses than when he is as free as the air'.[181] From Mercier's angle of vision, liberty and health seemed to be indissolubly linked.

Mercier's critique of court society as antithetical to the civic values of a free society helps us to understand the impossible position in which members of the Royal Society of Medicine found themselves on the eve of the Revolution. The Society's adaptation to the values of publicity and social utility, its prize essays, its metaphysic of scientific discovery and innovation, its network of enthusiastic and humane provincial practitioners, its commitment to social utility through state-sponsored health initiatives, all bespoke an Enlightenment commitment to the social values of science. Yet however enlightened Vicq d'Azyr might claim to be an embodiment of altruism, the Royal Society of Medicine was so enmeshed in the gilded cage of Ancien Régime patronage and privilege that its actions could only seem either venal and corrupt or else arbitrary and despotic. The connections at court which before 1789 were its lifeblood would, in the changed political conditions of Revolutionary France, become its ruination. By the eve of the Revolution, the language and the concerns of medicine and politics seemed thus to be running closely together. The question of Mesmerism in the 1780s, which we shall explore in the Conclusion, below, was significant in this respect not only for highlighting the new ways in which issues of health and politics were being interwoven by the last years of the Ancien Régime, but also for aggravating and embittering the medical and the political atmosphere, as the debate over charlatanism became part of a wider debate over the state of France.

[178] Ibid. viii. 254. [179] Ibid. iii. 201.
[180] Ibid. 8. [181] Ibid. xi. 302.

Conclusion

Beyond Mesmerism: The Scientization of Medicine and the Politicization of Health in the French Revolution

A. 'Cries, Gasps, Sighs, Songs, Groans': Mesmer and Mesmerism

Monsieur Mesmer's house is like a divine temple upon which all the social orders converge: decorated noblemen [*cordons bleus*], abbés, marquises, *grisettes*, financiers, young dandies, soldiers, doctors, young girls, *accoucheurs*, the witty and the bewigged, the ailing as well as the strong and the vigorous. Everything there indicates an unknown power. There are magnetizing bars, closed tubs, wands, ropes, magnetized flowering shrubs, and musical instruments including the harmonica, whose piping stirs one guest, causes slight rambling in another, laughter and sometimes tears in others. Add to these objects the allegorical paintings, mystical lettering, padded consulting rooms, special places designated for crises, a confused mixture of cries, gasps, sighs, songs, groans. One is forced to agree that this new form of spectacle is very tantalizing, requiring nothing less than the greatest genius to produce.[1]

The 'greatest genius' in question was Franz-Anton Mesmer (1734–1815), an Austrian physician, whose stay in Paris between 1778 and 1782 not only stimulated major upsets within the French medical world, but also became a kind of *cause célèbre* which seized the attention of Parisians on the eve of the Revolution. The evolution of the medical world in the eighteenth century which we have analysed in Part II of this volume provides a setting which helps us better to

[1] Jean-Jacques Paulet, *Mesmer justifié* (new edn., Constance, 1784), 2–3. This (ironically entitled) pamphlet by a leading physician-reformer is found in the collection of mesmerist and anti-mesmerist pamphlets, headed *Recueil général et complet de tous les écrits publiés pour et contre le magnétisme animal* (14 vols., Paris, n.d.), BN 4-Tb-62–1, on which we have drawn heavily in this Conclusion. Among the secondary literature, see esp. A. Bertrand, *Du Magnétisme animal en France* (Paris, 1826). R. Darnton, *Mesmerism and the End of the Enlightenment in France* (Cambridge, Mass., 1968) is an essential as well as an entertaining and insightful overview, while C. C. Gillispie, *Science and Polity in France at the End of the Old Régime* (Princeton, 1980), esp. 261 ff. offers a scientific angle, and L. Wilson, *Women and Medicine in the French Enlightenment: The Debate over* Maladies des Femmes (Baltimore, 1993), esp. ch. 5, 'The Debate over Mesmerism, 1778–1787', a valuable feminist approach.

understand the way in which public opinion was both shaken and stirred by the mesmerist phenomenon. The latter threw into relief, and heightened, a number of tensions and conflicts which lay at the heart of the changing relationship between the medical core and the medical penumbra, and indeed between the medical world as a whole and Ancien Régime society.

A qualified physician who had trained in Vienna, Mesmer arrived in Paris in February 1778. His doctoral thesis in 1766 had been on the certainly rather oddly archaic-sounding topic of the influence of the stars on the human body, and since the early 1770s he had been developing the form of treatment which he would unleash on the Parisian *beau monde*. Mesmer never provided a full exposition of his ideas and their sources, but in essence his theory reposed on the assumption that the cosmos was bathed in a universal fluid, invisible in its substance yet not its effects. The forces of electricity and ferro-magnetism were subspecies of this force, which Mesmer dubbed 'animal magnetism'. Mesmer was not the first to hold such views, which indeed did have something of an ancestry: Paracelsus and van Helmont had both evoked universal and invisible forces. Mesmer further held that just as there was one essential invisible force, there was in essence only one form of illness, caused by disorders in the constellation of animal magnetic forces within an individual's body, and one form of cure. The latter should take the form of restoring the balance of forces within the body by a range of treatments for which Mesmer became famous and which we shall discuss below.

The context for such views was inviting. Rising public interest in science in the Enlightenment created a demand for demonstrations of scientific effects rarely catered for in a system of higher education with little warmth for the visual aid.[2] Popular science had become all the rage in the late 1770s and 1780s. Parisians had formerly crowded in their hordes into the dissection theatres of great surgical masters, or been diverted by the sight of a choreographed circle of hapless monks receiving an electric shock and all leaping sequentially into the air. Now they thrilled to balloon flights, chemical experimentation, chess-playing robots, 'talking heads', and the like, ranging in their appeal from the intellectual rigour of the classroom to the vaudevillian feel of the fairground.[3] The acclaim for and interest in 'invisible forces' had reached the academy: in 1777 a special commission drawn from the Royal Society of Medicine and the Academy of Sciences, headed by the Parisian physician Pierre-Jean-Claude Mauduyt de la Varenne, had been established to investigate potential medical

[2] L. W. B. Brockliss, *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History* (Oxford, 1987), esp. 453.

[3] Darnton, *Mesmerism*, ch. 1, is esp. good on the taste for popular science. For overlaps between science and conjuring, see too B. M. Stafford, *Artful Science: Enlightenment Entertainment and the Eclipse of Visual Education* (Cambridge, Mass., 1994).

uses of electricity and magnetism.[4] In addition, under the influence of Queen Marie-Antoinette, the royal court had become highly receptive to the ideas and innovations of Austrian or German provenance—notions of *police* and 'medical police', for example, as well as German opera (Gluck was the queen's special favourite), and a diplomacy attuned to the Austrian alliance.[5]

On his arrival in Paris in February 1778, Mesmer set about seeking endorsement for his methods and approach from the core institutions of the corporative medical community. His efforts to ingratiate himself with the Academy of Sciences ran into the sand, however, and he found his way blocked there by Vicq d'Azyr, the secretary of the newly created Royal Society of Medicine, who became his most implacable foe. We can suspect a good degree of personal rivalry between the men, based on similarities as much as differences: both were past masters in the arts of publicity, and both were well established at court and had wealthy, well-connected clients, while the fact that Mesmer originated from Vienna, one of the European homes of the practical medicine preached by Vicq, must have lent piquancy to the rivalry. Vicq's opening gambits were woundingly effective, if impeccably correct. His suggestion that Mesmer's treatment be subjected to the surveillance of an *ad hoc* commission of the Society was calculatingly insulting: it appeared to be setting the marvels of the Austrian mage on the same level as proprietary medicines, quack remedies, and venereal disease treatments.[6] Mesmer wanted to share his discoveries with the world, not to have them submitted to the whims of an ambitious medical politician. He agreed to set up rooms, just outside Paris, in Créteil, where the effects of his treatment might be observed by the investigative scientist, but the terms were his own: they did not conform with the procedural rules for testing remedies which Vicq wanted and which had become established practice in the operations of the Royal Society of Medicine.[7]

The luminaries of the corporative medical community thus gave Mesmer and animal magnetism pretty short shrift. The Paris Faculty of Medicine was no more impressed than the Academy of Sciences or the Royal Society of Medicine. From 1779–80 critical anti-mesmerist articles began appearing in the Parisian and provincial press penned by sneering physicians as well as amused wits and chroniclers of public taste, reducing the 'Austrian charlatan' to the status of itinerant mountebank, who would be more suitably located on the Pont-Neuf than in the salons of the great. The corporative heavyweights were no

[4] Gillispie, *Science and Polity*, 270 ff. For electrotherapy, see too above, Ch. 9, Sect. B.

[5] For *police*, see above, Ch. 6, Sect. C; for musical tastes, W. Weber, '*La Musique ancienne* in the Waning of the Ancien Régime', *Journal of Modern History*, 56 (1984), 58–88.

[6] Gillispie, *Science and Polity*, 268 ff. Cf. above, Ch. 10, Sect. E. The point was esp. ticklish as Mesmer consistently refused to treat cases of venereal disease.

[7] Vicq was especially emphatic he would not regard as scientifically acceptable any case in which he was not allowed to see the patients before as well as after treatment: Gillispie, *Science and Polity*, 268. For trials in the setting of the hospital, see above, Ch. 11, Sects. C–D.

ILLUSTRATION 24. Mesmerist treatment. As this moderately realistic English copy of a French engraving shows, Mesmer's treatment was as easily satirized as depicted.

longer proving able, however, as we have noted,[8] to impose their authority on a medical world in flux. And Mesmer found some ardent disciples. Prominent among these was Charles Deslon (1739–86), a doctor-regent of the Paris Faculty who also had a foot in the camp of the royal medical household (he was physician to the duc d'Orléans). In September 1780 Deslon proposed to the Paris Faculty to stage a mesmerist contest: twelve patients would be treated with Mesmer's methods, twelve according to conventional methods under Faculty supervision. The Faculty refused to play ball, however; refuted Mesmer's propositions; and disciplined the hapless Deslon. Over the next years the Faculty would wage a pitiless struggle against mesmerism and its epigones, which led to the expulsion from its bosom of Deslon and two other confrères.[9]

Stymied at the level of academic medicine, Mesmer followed the classic dual route already marked out by practitioners seeking endorsement for their remedies; namely, he combined an appeal to the public over the heads of the corporative community with manœuvring for favour in the royal court. 'I have sought out those persons', Mesmer noted imperiously, 'whose opinion carries some weight with the public. I invited them to witness the salutary effects of my discovery.'[10] He built up as patrons and/or patients an impressive clientele of opinion-formers including court aristocrats, members of the Paris Parlement and high *robe*, and

[8] See above, Ch. 12, Sects. D–E.

[9] This struggle can be followed in *Commentaires de la faculté de médecine de Paris (1777 à 1786)*, ed. G. Steinheil (2 vols.; Paris, 1903), esp. ii.

[10] Cited in ibid. 269.

wealthy commoners (plus a suitably cosmetic list of paupers, with whose unremunerated treatment Mesmer sought to establish his credentials for fashionable *bienfaisance*). Supporters of animal magnetism included a strong admixture of Freemasons, who warmed to the shamanistic charisma of the Austrian physician, and a number of Queen Marie-Antoinette's intimates, notably the duchesse de Chaulnes and arch-female Freemason, the princesse de Lamballe. It appears to be through this channel that in 1782, when Mesmer announced that he would quit Paris, shaking the dust of established medicine from his shoes, manœuvres were made to keep him in France. Through principal minister Maurepas, the government offered Mesmer a life pension of 20,000 *livres* per annum plus provision for a mesmerist institute, or clinic, for the perfection of the art of curing through animal magnetism. The proposed stipend exceeded any within the royal medical household save only that of the premier physician, yet Mesmer disdained the offer—turning down Marie-Antoinette was something of a coup—and in 1782 moved to the resort of Spa in the Liégeois.[11]

In moving to Spa, Mesmer pointedly repudiated his erstwhile disciple Charles Deslon (already a Faculty reject),[12] but the latter stayed on in Paris and continued to offer mesmerist therapy. Mesmer was, however, now supported by the Parisian barrister and intellectual Nicolas Bergasse, and his friend the Alsatian banker Guillaume Kornmann. The year 1782 saw the launching of a brainwave of the two enthusiasts, namely a mesmerist national organization. The 'Society for Universal Harmony' (Société de l'harmonie universelle) was essentially a joint-stock company for animal magnetism. A publicity and promotion drive in 1782–3 saw Bergasse and Kornmann selling shares in the new company at 100 louis (that is, 240 *livres*) each. There was no want of subscribers: high nobles and clerics jostled alongside bourgeois, professionals, and medical men. By 1784 there were said to be 430 members in Paris alone, with mesmerist outposts in many provincial cities: Brittany, Guyenne, and the Lyonnais were said to be particularly receptive, but Provence, Languedoc, and all university towns were resistant to mesmerist charms.[13] Mesmerist ideology had become at once a national movement and a tidy business. Bergasse's missionary emphasis on the need to publicize and to spread mesmerist doctrines clashed, however, with the canny tendency of the master himself to cloak the core of his doctrine in secrecy. While Mesmer invoked the sacred and inviolable rights of intellectual property,

[11] For stipends, see C. Jones, 'The *Médecins du Roi* at the End of the *Ancien Régime* and in the French Revolution', in V. Nutton (ed.), *Medicine at the Courts of Europe, 1500–1837* (London, 1990), 223: the *premier médecin* got 34,000 *livres* p.a., while the next-best remunerated, the *médecin ordinaire* and the *médecin des enfants de France*, received 16,700 and 15,000 *livres* respectively.

[12] See letter from Mesmer to the baron de Breteuil, BN Joly de Fleury 1690.

[13] For the geography of mesmerism, see Michel-Augustin Thouret, *Extrait de la correspondance de la Société royale de Médecine relativement au magnétisme animal* (Paris, 1785), 45 ff.

his followers regarded any discovery in the medical sciences as entailing, in the public interest, the diffusion of use-rights throughout the land.[14] Mesmer and Bergasse squabbled and fell out in 1784, the former decamping (allegedly some third of a million *livres* richer) to the shores of Lake Constance in Swabia.[15]

By that time, the headless movement in France was under the most serious of scientific investigations. It was symptomatic of both the movement's strength and the weakening ambitions of central government in the 1780s that the state ruled out disciplining the mesmerist movement by simple act of *police*. The Paris *Lieutenant général de police* feared, it seemed, that if he attempted to repress the movement for breaking the Faculty's medical monopoly or for disruptions to public order, it might trigger a riposte from the Parlement. Stalwart supporter of medical orthodoxy for most of the early modern period, the Parlement had turned increasingly unsupportive of late: it had, for example, taken the side of both surgeons and non-Faculty physicians appointed to Paris hospital posts in their struggles against the Faculty. And it now included in its ranks more than a few adepts of animal magnetism, and could no longer be counted on.[16] Instead, the baron de Breteuil, whose portfolio as minister of the royal household (*maison du Roi*) included responsibility for public order in the capital, appointed two scientific commissions to report on the medical credentials of the mesmerist doctrine and movement. One commission was drawn from the Royal Society of Medicine, the other was originally based on the Faculty of Medicine, but co-opted members of the Academy of Sciences (notably Lavoisier, Bailly, and Franklin), who imprinted their strong personalities upon it.

The committees investigated the claims of animal magnetism using the kind of empirical trials which the presence of Mesmer had formerly inhibited but which had become customary with all innovatory medical treatments in the late Ancien Régime. The results were unequivocal. Animal magnetism did not exist; mesmerism was a sham.[17] As C. Gillispie, summarizing the findings, has noted, tests established that 'susceptibility to magnetism was a function of suggestibility, poverty and ignorance. Children, commissioners and stable persons experienced nothing. No shred of physical or physiological evidence could be adduced

[14] For this clash of views around intellectual property, see the discussion in C. Hesse, *Publishing and Cultural Politics in Revolutionary Paris, 1789–1810* (Berkeley & Los Angeles, 1991), esp. ch. 3.

[15] Bertrand, *Magnétisme animal*, 52.

[16] See esp. Darnton, *Mesmerism*, 86 ff. on this. For struggles involving surgeons and hospital appointments, see above, p. 632.

[17] The best analysis of the committees' conclusions are to be found in Gillispie, *Science and Polity*, 280 ff. Antoine-Laurent de Jussieu (1748–1836), a member of the Society's committee, did in fact issue a minority report which suggested that there might actually be something worth investigating: ibid. 283 f. But it had little impact.

to indicate the existence of a fluid.'[18] The effects produced by animal magnetism were generated, it was held, in the imagination. This was a devastating condemnation indeed in a period which, as we have seen, had come to accept the existence of psychosomatic phenomena, but which saw the imagination as an unhealthy and inferior faculty and a hindrance to contentment and right understanding.[19] It was all the more severe, moreover, for being so widely publicized: the government was rumoured to have issued between 12,000 and 20,000 copies of the report of the Academy of Sciences' committee.[20] Furthermore, the episode brought into play a highly delicate matter of public morality. In a supplementary, confidential report which Bailly drew up for the Academy of Sciences' committee and which was submitted personally to the king, it was stated—in a language which mixed clinical prose with the knowing, heavy-breathing tug of the pre-Romantic novel—that the effect of mesmerist treatment on women could be spectacularly ecstatic:

> Proximity [between mesmerizer and mesmerized] becomes as great as possible, face almost touches face, breath intermingles, all physical sensations are shared at once, and the reciprocal attraction of the sexes must needs act with all its force .... The eyelids become moist; breathing is short and gasping; the chest rises and falls rapidly; convulsions set in, together with jerky and sudden movements of the limbs or of the whole body. In lively, sensitive women, the tenderest of these emotions often ends in a kind of convulsion. That state is succeeded by languor, prostration, a kind of slumber of the senses which is the repose required after a violent disturbance.[21]

Despite the slightly occlusive language, the message seems clear: mesmerism gave women orgasms.

The ecstatic, orgasmic potential of mesmerist treatment put something of a question mark against its social acceptability. To associate any movement with convulsive females was a sure-fire smear tactic, as the Jansenists could attest: the female convulsionaries of Saint-Médard in the early 1730s had cast a long-lasting cloud of ridicule over the Jansenist movement as a whole.[22] As in their case, moreover, female convulsions were figured as contagious, as embodying a kind of 'epidemic' of gendered irrationality.[23] In what may well have been merely an anti-Mesmer spoof, the author of the one pamphlet in 1785 highlighted the 'real'

[18] Ibid. 281. [19] See above, Ch. 7, Sect. D.

[20] *Lettres sur le magnétisme animal* (Brussels, 1784), 90 (12,000 estimate); Nicolas Bergasse, *Considérations sur le magnétisme animal* (The Hague, 1784), 25 (20,000 estimate).

[21] Cited in Bertrand, *Magnétisme animal*, 513.

[22] Cf. B. R. Kreiser, *Miracles, Convulsions and Ecclesiastical Politics in Early Eighteenth-Century Paris* (Princeton, 1978); and above, Ch. 6, Sect. E.

[23] For the term 'epidemic', see the secret report, cited in Bertrand, *Magnétisme animal*, 516. Cf. L. Wilson, *Women and Medicine*, 110; and Darnton, *Mesmerism*, 40 (citing the *philosophe* La Harpe).

cures achieved by the intercession of the Jansenist deacon Pâris in contrast to the 'phoney' operations of the mesmerists. On a related tack, another author put all mesmerist 'cures' down to fantasy, and compared the mesmerized with the victims of witches and astrologers in past generations.[24] To equate the followers of Mesmer with the mystified victims of religious error and enthusiasm was, like the related strategy of making Mesmer himself an *homme à secret* or a travelling mountebank,[25] a means of criticizing the movement for its lack of scientific authenticity and moral transparency. An insult to well-ordered medicine, mesmerism seemed to pose a threat to morals as well as health.

The female orgasm was, moreover, something of a hot topic. As we have seen, the Galenic 'two-seed model'—whereby both male and female had to achieve ejaculation in order to procreate—had presupposed a certain homology between men and women's bodily organization. The two sexes were situated along a spectrum of organizational variation, they were not biologically distinct one from the other. As T. Laqueur has shown, the eighteenth century witnessed the breakdown of this model, and an emphasis on forms of reproduction which did not involve active hedonic participation by the female partner. This, moreover, formed part of a transformation whereby biological 'incommensurability' between the sexes became fundamental in the construction of ideas of maleness and femaleness.[26] Men now were to have the orgasms; women were to stick to babies. The emergence of the theory of biological incommensurability was predicated upon a discourse of womanly passivity and a female destiny of unrelievable maternity.

The female orgasm was now shocking: and it shocked all the more—as in the case of mesmerist treatment—when it formed part of a purportedly medical therapy. As we have seen, medicine in the Enlightenment had become increasingly observational and empiricist in its procedures. Physicians foregrounded the importance of a manipulation of the environment to produce a health-giving (or at very least illness-inhibiting) context for medical care rather than gung-ho interventionism, and bolder spirits, responding to the diffuse neo-Hippocratism of the age, even shrugged helplessly at hopes of cure save by the healing force of Nature.[27] With morbidity rather than mortality now holding centre stage in reflection on health, letting Nature do its work seemed to be the key—and with Nature in the driving seat, physicians blended into the surroundings. They

[24] *Relation de la maladie et de la guérison miraculeuse de Mademoiselle Louise Guélon de Troyes* (n.p., 1785); and *Lettre sur le secret de M. Mesmer* (Paris, 1782).

[25] As an ex. of the latter tendency, see *Remarques sur la conduite du Sieur Mesmer* (n.p., 1784).

[26] T. Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (London, 1992), esp. ch. 5, 'Discovery of the Sexes'. Cf. above, pp. 467–70, for the growing emphasis post-1750 on the woman as mother.

[27] See above, Chs. 7, Sect. C, and 12, Sect. C.

tended, moreover, to make the question of interventionism a litmus test of good physic between themselves and the ever more ambitious surgeons. The latter touched, manipulated, cut, and pulled the sick body, physicians merely observed. In practice, as we have seen, physicians working within hospitals on the bodies of the poor had developed a form of medical research which did not shun intervention in therapy.[28] Yet the protocols and the polemics had it, all the same, that non-interventionism was the sign of good physic.

There was, moreover, a moral as well as a scientific rationale for this hands-off approach. We see this particularly clearly as regards childbirth. Male accoucheurs increasingly took a place alongside (and normally above) traditional midwives only by breaking some long-held traditions about the medical practitioner's rights over the body of the female patient: as recently as 1732 male surgeons had been forbidden access to the midwife training school in the Paris Hôtel-Dieu on the grounds of the unseemliness of male presence alongside a naked female form (it was the custom for women to give birth here in the nude).[29] Surveillance of the act of childbirth by an accoucheur was only achieved through the opening-up of a strictly observed moral distance between male and female. Physicians insisted that this relationship required the strictest of moral policing. The advances of obstetrics necessitated the construction of severe notions of medical propriety, which de-eroticized bodily (and in this case genital) contact.

By priding itself on its naturalness, mesmerism seemed to aspire to the hands-off ethic of contemporary physic: 'in Mesmer's hands', wrote one fan, 'animal magnetism appears to be nothing but Nature itself'.[30] Yet in fact, the treatment offered by animal magnetism was exceptionally interventionist, and broke all the rules in the developing book of therapeutic convention. In the one-to-one encounters on which mesmerist therapeutics were based, Mesmer (or another, seemingly always male, animal magnetizer) would sit facing the patient, with his own back to the north, and with feet and knees touching; he would then place his thumbs under the patient's rib-cage to massage the thorax and abdomen, then shift his attention to the locale of the illness (head, back, etc.). The hands of the mesmerizer, it was held, had become differentially charged poles, and this kind of massage acted to place at the disposition of the magnetically disordered body the animal magnetism of the mesmerizer. There were variants of this: metal rods or poles were sometimes run over the elongated body of the patient, for example, while a group therapy was also developed, with

[28] See above, Ch. 12, Sect. D.

[29] BN Joly de Fleury 1214. The other case of intervention on the female body was smallpox inoculation. The inoculable female arm was less of a threat to propriety. As with childbirth, many physicians tended to leave this to the surgeons.

[30] C. Deslon, *Observations sur le magnétisme animal* (The Hague, 1780), 101.

patients forming a circle, sitting cross-legged, thumb grasping neighbourly thumb, around shallow wooden tubs filled with iron filings.

Mesmer himself was of course a qualified physician, but many of those who trained to act as animal magnetizers were not. At sessions of instruction in mesmerist doctrine presided over by the master, the latter would conclude business by embracing his acolytes with the words, 'Go forth, touch, cure'.[31] The thaumaturgical strain in such a formulation recalled the ancient refrain with which the kings of France touched those affected with the king's evil. Yet as we have seen,[32] the royal formula had changed during the Enlightenment from the altogether predictive 'Le Roi te touche, Dieu te guérit' ('The King touches you, God heals you') to the subjunctive, more speculative, quasi-desacralized 'Dieu te guérisse, le Roi te touche' ('May God cure you, the King touches you'). Whereas the Bourbon practice failed to inspire confidence (even in its royal host), the mesmerist formula attracted affecting support.

These intriguing mesmerist transactions redramatized and retheatricalized (as well as, worryingly, eroticized) sickness, and seemed to do so in an age which had lost its faith in the miraculous strain of baroque piety and in the sacrality of its divine-right monarchy. A significant point of contrast between the monarchical and mesmerist practices lay in the brazenly championed scientific claims of animal magnetism. Whereas absolutist rituals had always implicitly both transcended and mocked human reason, mesmerist treatment took place in an environment which was rigidly controlled according to contemporary scientific criteria. Thermometers, barometers, and hygrometers monitored the environmental conditions. Curtains were drawn, drapes down. A pianist (or harmonica-player) was at hand offering soothing musical relief (spasmodically interrupted with martial strains). Mesmer himself would stroll peaceably around, clad in lilac-coloured taffeta robe, trimmed with the finest lace. Occasionally he would stop by a patient to run his polar extremities over their tumescent bodies. If a patient's convulsions got too extreme, he or she would be swiftly removed by mesmerist flunkeys into a padded crisis-room.

Mesmerism thus embraced into its healing rituals the sacral aura of thaumaturgy, in which the ruling dynasty was losing interest, as well as the prestige of the scientific. In an interesting allusion to this apparent shift in healing beliefs, the Royal Society of Medicine wrung its collective hands at the way in which the vestiges of religious fanaticism had seemingly been displaced into intellectual culture. Comparing mesmerism, once again, with the Jansenist convulsionary movement, it noted that 'Few physicians believed in the blessed Pâris, and only five or six of them certified his miracles. Yet a large number of physicians believe

[31] Darnton, *Mesmerism*, 76 ('Allez, touchez, guérissez').

[32] See above, p. 388.

in Doctor Mesmer. Let us be charitable enough to suggest that it is because today superstition is a *physico-medical* superstition.'[33]

The mesmerist preoccupation with scientifically controlling and regulating the environment in which care and cure took place also resonated, of course, with contemporary ideas on medical treatment. The mesmerist cabinet had something about it of the hospital. In the late Enlightenment, as we have seen, it was believed that this institution needed to be evacuated of noxious extraneous and environmental influence and subjected to scientific monitoring.[34] Yet where the hospital was to be an institution geared round scientific advance and championed by leading physicians, the mesmerist meeting was granted no such esteem for it was grounded in theories which deeply divided physicians. For many practitioners ensconced within the core of the corporative medical community, moreover, the encouragement mesmerism seemed to offer to medical treatment by the laity was the final straw: based on faulty, crackpot theories, presided over by a charlatan, the movement deliberately set out to encourage laymen to meddle in things which should be left to the supervision of the trained physician. No wonder such a farrago had the immoral effect of bringing women to orgasm outside the marital bed (or indeed anywhere). 'The renowned author of the discovery of animal magnetism has done for love', ironized one pamphleteer, 'what Newton did for the theory of the cosmos': that is, one assumes, to make the earth move.[35]

In the pitched pamphlet battle which now raged—several hundred mesmerist or anti-mesmerist writings appeared, especially between 1782 and 1784—no writer, it would seem, defended mesmerism for its erotic potential.[36] Indeed, pro-mesmerists were careful to distance themselves from any apparent accommodation with 'female weakness', and preached the values of animal magnetism for producing naturally good wives and mothers: the breast-feeding mother, for Mesmer, was in a state of permanent animal magnetism.[37] Now utterly bereft of its founder, the mesmerists put up a very varied defence against this attack on its principles and practices. An odd turn was taken when the marquis de Puységur, a liberal nobleman who had sat at Mesmer's feet, discovered the facility of hypnotizing patients (a process referred to as 'somnambulism' (*somnambulisme*)), which added to the more bizarre elements of mesmerist

[33] *Mémoires de la Société royale de Médecine*, 2. 348.

[34] See above, Ch. 11, and, more generally, M. Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, Eng. trans. (London, 1973). Much the same was true of the lunatic asylum: see id., *Folie et déraison: Histoire de la folie à l'âge classique* (Paris, 1961).

[35] *Le Moraliste mesmérien* (London, 1784), cited in Darnton, *Mesmerism*, 55. It seemed always to be assumed, incidentally, that the animal magnetizer was a man: Bertrand, *Magnétisme animal*, 512.

[36] Bertrand, *Magnétisme animal*, 74 (and for the movement in the late 1780s generally, see esp. 66 ff.). For the pamphlets, see too the references above, n. 1.

[37] This theme is covered particularly well in L. Wilson, *Women and Medicine*, ch. 5.

therapy.[38] The movement was taken up by liberal nobles in the provinces imbued with the current notions of humanity and *bienfaisance*, and they were soon to be found wandering around their seigneuries, mesmerizing and hypnotizing their sick peasants back to health—it was a case now of *mesmérisme* (as well as *noblesse*) *oblige*. In Paris and in some provincial cities, mesmerism became entangled with Masonic networks. This sometimes—as, notably, in Lyons, where it became a form of orientalist spiritualism—produced an occultist and mystical strain of the movement. At other times and in other places, as we shall see, it shaded into a new political radicalism.

B. Mesmerism, Medicine, and the New Cultural Politics

As we have seen, the character of scientific knowledge current in early modern France had been very considerably determined by the corporative character of the Ancien Régime state. If the Paris Medical Faculty especially was the cynosure of medical scientific correctness on matters medical, this was not simply because it contained a large proportion of the most erudite physicians in France, but also, and probably more importantly, because it was the most privileged, prestigious, and power-wielding instances of medical organization. This overlap of politics and epistemology seemed unproblematic as long as the polity remained relatively stable. As the eighteenth century progressed, however, this was less and less the case. Consequently, any criticism of medical institutions which wielded power in any form was likely to have both a scientific and a political dimension. In the fast-evolving political atmosphere of the 1780s, as the most fundamental institutions of the state were subject to scrutiny and critique, it was to prove difficult for the medical bodies at the core of the corporative medical community to keep themselves detached from a more far-ranging hostility to existing power sources. According to Bergasse, for example, 'the grouping of doctors is a political body, whose destiny is linked to that of the state. Thus within the social order, we absolutely must have diseases, drugs and laws, and the distributors of drugs and diseases influence the habits of a nation perhaps as much as do the guardians of its laws.'[39]

In analysing the ideology, sociology, and dynamics of the radical wing of the mesmerist movement, it is tempting to follow the theories proposed and popularized in the work of R. Darnton. By the last years of the Ancien Régime, a kind of intellectual establishment had been formed, in the context of the growing status of the writer and the growth of a relatively ill-supported intelligentsia. Intel-

[38] See esp. Bertrand, *Magnétisme animal*, 211 ff.

[39] Darnton, *Mesmerism*, 84, citing *Lettre d'un médecin de la faculté de Paris à un médecin du collège de Londres* (The Hague, 1781).

lectuals—and this holds for young scientists as well as more literary figures—who were unable to break into the charmed circle of this establishment came to form a Grub Street of alienated outsiders, stimulated to attack the insiderdom of the literary and scientific establishments. Such figures went on, in many cases, to careers as radical revolutionaries after 1789. Darnton cites, for example, the case of the trained physician Jean-Paul Marat, the 'Friend of the People', who in the last years of the Ancien Régime, was purveyor of an *eau anti-pulmonique* and anti-gonorrhoeal remedies as well as a self-confident experimental philosopher who fell foul of medical scientific consensus and drifted into radical politics out of spite, indignation, and a sense of professional failure.[40] A similar trajectory was taken by certain mesmerists: Bergasse and Kornmann, in particular, along with the influential *parlementaire* Duval d'Eprémesnil, had all broken with Mesmer in 1784 precisely because he had betrayed his initial inspiration of attacking the 'despotism of the academies', and by the late 1780s these men would be working in increasingly radical directions in the company of other politically determined figures such as Lafayette, Adrien Duport, Clavière, and Brissot—all individuals who would make their mark after 1789. The critique of the 'despotic' way in which mesmerism had suffered at the hands of the core of the medical community became the hallmark of a broadening campaign attacking the improper confluence of the corporative structures of power and knowledge.

Yet though there was undoubtedly an outsider v. insider dimension to medical debates and polemics on the eve of the Revolution, it is pertinent to remark, for the case of medicine at least, the extent to which, first, the major line of fracture passed within, rather than without, the core of the medical community; and, second, the polemics had developed out of differences about the nature of medical authority which were firmly in place long before the 1780s, and had many more dimensions besides frustrated intellectual ambition. If medical authority was under assault on the eve of the Revolution, this was less the achievement of a handful of outsiders-cum-wild-men from darkest Grub Street than the result of that long process of internal erosion in the institutional and epistemological authority which we have charted in Part II of this volume.

The mesmerists were, then, far more than a bunch of marginalized *frustrés* and *ratés*. Though *bienfaisant* noblemen, clergymen, and others could feel free to practise animal magnetism and somnambulism, many medical practitioners—and especially physicians—rallied to the mesmerist cause too. Parisian doctors who had at the very least studied with Mesmer were numbered in dozens. At Lyons, the mesmerist chapter contained five physicians, seven

[40] See above, Ch. 7, Sect. E. For Marat, the most thorough account is provided in Gillispie, *Science and Polity*, 290 ff. L. R. Gottschalk, *Jean-Paul Marat: A Study in Radicalism* (Chicago, 1967 edn.) is a still serviceable, but heavily psychologistic biography which conforms quite well with the 'outsiders' story recounted by Darnton, *Mesmerism*.

surgeons, and an apothecary.[41] One pamphlet, countering the commissions' reports, claimed that Mesmer's therapy had in fact worked, under experimental conditions, on twenty-three men, and that this number included three physicians, two surgeons, and an oculist.[42] Another writer claimed that while the capital spent its time making up its mind, provincial physicians passing through Paris were becoming mesmerist enthusiasts, taking the doctrine and its practices back to their home towns. The provincial *Affiches*—the news-sheet-advertisers to be found in nearly fifty provincial cities in 1789—also showed a great deal of interest in mesmerist doctrine, and acted as rallying-points for local enthusiasts.[43] The stress on utilitarian diffusion of medical knowledge made it more difficult to claim that mesmerism was characterized by secrecy and fraudulent claims.[44] The Royal Society of Medicine, that vigilant scourge of medical charlatanism, proved quite unable to keep it in check. In Paris too, the public remained highly divided, despite smear campaigns aimed at portraying mesmerists as immoral and as clandestine practitioners of abortions.[45]

In the capital, hopes that the reports of the two commissions on animal magnetism would crush the movement completely within the core of the medical community were dashed by the ham-fisted way that the corporative heavyweights endeavoured to exploit their temporary advantage over the mesmerists. In August 1784 the Faculty issued a stern decree to the effect that any individual adhering to mesmerist doctrines or coteries would be struck from their list, and insisted on an individual roll-call in which doctors were asked to swear 'they would never declare themselves supporters of animal magnetism'. Such arbitrary behaviour was unwise. Most caved in under Faculty pressure, and only three doctors-regent refused to swear: but they made a considerable fuss about it. Charles-Louis Varnier, both a doctor-regent of the Paris Faculty and a member of the Royal Society of Medicine, refused to take the oath and on 23 October 1784 was formally struck off the Faculty register. Varnier could now frame his

[41] A good overview of the movement on the Parisian medical world is provided in P. Delaunay, *Le Monde médical parisien au XVIIIe siècle* (Paris, 1906). See esp. 345 ff. For Lyons, ASRM 126.

[42] *Supplément aux deux rapports de MM. les Commissaires de l'Académie et de la faculté de médecine, et de la Société royale de Médecine* (Amsterdam, 1784): ex. at BN Joly de Fleury 1214, fo. 194. Of the twenty-three males, besides the medical practitioners, there were also a prince, a marquis, a count, etc.; of eleven women cited, one was a midwife.

[43] *Lettre d'un anglois à un français sur la découverte du magnétisme animal* (Bouillon, 1784), 7 ff. For the *Affiches*, see C. Jones, 'The Great Chain of Buying: Medical Advertisement, the Bourgeois Public Sphere and the Origins of the French Revolution', *American Historical Review*, 101 (1996), 13–40.

[44] See e.g. François-Amédée Doppet, *Traité théorique et pratique du magnétisme animal* (Turin, 1784). Doppet, a Turin-trained physician (and later a radical Revolutionary), makes it clear he has broken mesmerist promises of secrecy and offers a practical guide to magnetizing individuals and trees.

[45] Cf. L. Wilson, *Women and Medicine*, 117 f.

defence, first by taking the issue into the public sphere, and second by basing his defence—which he published in early 1785—not on the grounds of animal magnetism's putative veracity, but of the constitutional issue of abuses of power. The Parlement of Paris, which for some time had been talking the languages of constitutionality and attacking the 'despotism' of power (and which included some mesmerist enthusiasts among its ranks) could not fail to be sympathetic.[46]

Once the commissions had reported, the mesmerist debate thus passed beyond the stage of a ruling of experts on scientific veracity and took the form of a *cause célèbre*, played out in front of an enthralled reading public. Etched out preferably in lurid, melodramatic colours, it had become a critical site of political contestation in the last years of the Ancien Régime, and had been highly influential in promoting the notion of the public as a kind of independent tribunal whose verdict determined the justice of a case.[47] François-Louis Thomas d'Onglée, another Parisian doctor-regent, who, for following a course by Charles Deslon for three months, had also been threatened with being struck off, attacked 'the most absolute [*sic*] despotism over opinion' which the Faculty's anti-mesmerist decree constituted. 'Oh! respectable public!', he continued, 'It is your justice I ask for. I wish neither to wrong you nor to lead you astray.'[48] The united front which the core medical institutions within the corporative medical community had put up against mesmerism could now very easily be represented as 'systematic persecution by the academic great and good [*des savants et des sages*]'.[49] The author of a rather wild and woolly pamphlet offering a *Histoire du magnétisme en France* concluded in similarly anti-hierarchical mood by looking forward to the day 'when the schools of medicine, chemistry, pharmacy, and botany will have been destroyed', producing a 'general revolution [*sic*]' by which 'every home, every family, every person will have his practice, and friends will be invited round to attach themselves to mesmerist tubs in the way now we invite friends to come and dine'.[50]

Nor was it only embattled mesmerists who now used such language. There was an issue of tolerance of divergent views in play here which made the case of broader relevance. The relegalization of Protestantism, for example, was being

[46] *Mémoire pour Me. Charles-Louis Varnier, ... appellant d'un décret de la faculté* (Paris, 1785). For the Parlement's broader constitutional position, cf. B. Stone, *The French Parlements and the Crisis of the Old Régime* (Chapel Hill, NC, 1986), esp. ch. 3.

[47] S. Maza, *Private Lives and Public Affairs: The 'Causes Célèbres' of Pre-Revolutionary France* (Berkeley & Los Angeles, 1993); K. Baker, 'Public Opinion as Political Invention', in id., *Inventing the French Revolution: Essays on French Political Culture in the Eighteenth Century* (Cambridge, 1990).

[48] *Rapport au public de quelques abus auxquels le magnétisme animal a donné lieu* (Paris, 1785), 8, 13.

[49] Petition of animal magnetisers in Dec. 1784, cited in Darnton, *Mesmerism*, 86 n. 2.

[50] *Histoire du magnétisme en France, de son régime et de son influence pour servir à développer l'idée qu'on doit avoir de la Médecine universelle* (Vienne [*sic*], 1784), 30.

widely and favourably discussed even in governmental milieux. As one polemicist noted, were a less harsh view of mesmerism to be instituted, 'just like those countries in which tolerance is allowed in religious matters, so tolerance in medical matters would be permitted in France'.[51] Others too found the way in which abuses of power were being configured in the mesmerist case recognizably similar to other contexts. Thus the lawyer Joseph Servan, erstwhile critic of the snooty magistracy of the Grenoble Parlement, and aficionado of the melodramatic *cause célèbre*, eagerly joined the fray, utilizing the mesmerist farrago as a pretext for issuing a number of pamphlets which ranged from the earnest to the light-heartedly satirical.[52] At the other extreme, even a high court aristocrat (and future arch-counter-revolutionary) like the marquis de Bombelles was affected enough by the mesmerist case to begin to doubt conventional medical lore: in his journal in 1785 he noted how the minister for the royal household, the baron de Breteuil, had regarded Mesmer as a quack; but, he continued, even 'a charlatan may make an unexpected discovery, and when the discovery is shared among honest folk it acquires a degree of authenticity which deserves some return on a first opinion, formed perhaps too hastily'.[53] Even for a court figure like Bombelles, it seems, public opinion was getting a purchase over the doctors in questions of medical legitimacy.

The debate was thus widening out and, moreover, taking the form of the revaluation of the public over and above questions of science and expertise. Physicians might claim to know everything, one pamphleteer noted, 'and indeed it would seem appropriate that [truth] should manifest itself first to savants, and that only subsequently should it arrive amongst the public. But in fact it is very precisely the opposite which is true: nearly always truth passes from the public to the savants.'[54] The mesmerist polemics thus were helping to link with broader critiques of medical expertise and the growing devaluation of institutional science which was, as we have seen, in inverse proportion to the revaluation of public opinion as a source of legitimacy.[55] Generally, it was the negative aspects of conventional medicine rather than the positive point of mesmerist doctrine which got the highest profile. Physicians, claimed the pro-

[51] *Lettres de M. L.B.D.B. à M. L.G.H.D.L.S. à Marseille* (Geneva, 1784), 12. Cf., on the same theme, *Lettre d'un anglois*.

[52] *Doutes d'un provincial, proposés à MM. les médecins commissaires, chargés par le roi, de l'examen du magnétisme animal* (1784); and *Questions du jeune docteur Rhubarbini de Purgandis, addressées à MM. les docteurs-régens de toutes les facultés de médecine de l'univers, au sujet de M. Mesmer, et du magnétisme animal* (1784). For a discussion of Servan's activities, see L. Wilson, *Women and Medicine*, 114–16, 199–200.

[53] *Marquis de Bombelles: Journal* (2 vols.; Geneva, 1978–82), i. 51.

[54] *Lettre d'un anglois*, 7.

[55] Cf. above, Ch. 10, Sect. D. For a similar prioritization of public over academic opinion, see Louis-Sébastien Mercier, *Tableau de Paris* (12 vols.; Amsterdam, 1782–8), viii. 24 ff.

mesmerist author of *Remontrances des malades aux médecins de la faculté de médecine de Paris*, did not understand the first principles of disease and had little positive to offer by way of cure in a long list of illnesses amongst which he cited fevers, apoplexy, paralysis, hydropsy, tuberculosis, asthma, cancer, gout, colic, haemorrhoids, rabies, contagion, and even the slightest of infections such as migraine, colds, and fluxions.[56]

This line of argument pessimistically outlining the deficiencies of orthodox therapeutics chimed nicely too with the movement of medical writings over the Enlightenment which had prized self-help and preventive health measures. The 'eighteenth-century campaign to avoid disease' had highlighted an environmentalism whose precepts were to be implemented by administrators and officials as much as by physicians, and which was characterized by a belief in the healing powers of Nature which sometimes shaded into outright therapeutic pessimism.[57] By stressing their circumscribed, subaltern role within the healing process, physicians had left their flank highly exposed to an attack of this sort. The same was true too of the medical self-help movement in the world of popularizing texts. Older, traditional books of remedies had been joined, in the course of the eighteenth century, as we have seen, by a new type of medical self-help manual, the most celebrated of which was Tissot's *Avis au peuple sur sa santé*.[58] Although such texts assumed that treatment should be under supervision from a physician, they demonstrated how much individuals could do to preserve their health by maintaining a lifestyle which was at once moderate and natural. 'In the order of Nature', as one pro-mesmerist pamphleteer noted, 'every man must be his own physician; he must know what is appropriate and harmful to his preservation.'[59] Despite their formal admonitions about medical surveillance, such texts seemed almost to want to do physicians out of a job—especially physicians so apt to play down their own efficacy. Furthermore, with the Rousseauian gloss that the 'natural' often took in this context, such self-help could be presented as quintessentially patriotic. The key to healthier bodies lay in collective self-empowerment—but also in ensuring that life was lived in healthier surroundings.

Besides highlighting the trend for medical self-help, the attack on the orthodox medical community triggered off by the mesmerist affair also struck at medical doctrine's claims to scientific status, one of its most undefended spots. As long as medicine was, like other branches of learning, orientated around the

[56] (Amsterdam, 1785), 44 ff.

[57] Cf. J. C. Riley, *The Eighteenth-Century Campaign to Avoid Disease* (London, 1987).

[58] See above, Ch. 7, Sect. D. On the general theme of medical self-help, see L. Wilson, *Women and Medicine*, esp. 114 ff.; and R. Rey, 'La Vulgarisation médicale au XVIIIe siècle: Le Cas des dictionnaires portatifs de santé', *Revue de l'histoire des sciences*, 44 (1991), 413–33.

[59] *Remontrances des malades de Paris*.

rational exposition from on high of established principles of knowledge, there was little problem with it claiming the mantle of practical reason. The failure of the customary transmitters of that medical wisdom, the faculties, to keep abreast of changing curricular needs—in particular the needs of surgeons—had undermined their claim to speak with authority for all engaged in medicine, as we have seen. When the sciences, moreover, notably from the seventeenth century, took on a more resolutely empirical and inductive turn, those claims looked even more difficult to uphold.[60] Medicine lacked, for example, the mathematical basis which invested physics with a new certainty, and it encountered very much more problematic circumstances of evidence and proof.[61] A more scientific approach had destroyed the old Galenic certainties and accumulated a mountain of new points of understanding of how the body worked. Yet that understanding was still massively incomplete, and did not allow any certainty as regards the most elementary procedures of diagnosis and cure. Only the surgeons could claim a degree of certitude on their, albeit highly circumscribed, procedures. Conventional medicine, pointed out a mesmerist pamphleteer, with more than a little perspicacity, was in a state of theoretical perplexity, unable to tell why some medicines worked on some patients and not on others, or even why they worked at all. The result was a wild carousel of ever-changing medical fads and fashions. 'But what confidence can one place in a medicine which undergoes such bizarre variations? What is good at one time ought to be good in another.'[62] Physicians who claimed scientific status for their very imperfect art could only, it seemed, be lying. 'All the faculty's doctors', claimed one satirist, 'will put on a good face in protesting that medicine is a real science, based on principles of certainty and on the experience of several centuries. (And they will try to do this without blushing.)'[63]

The vantage-point from which this kind of charge against conventional medicine was being made is a particularly revealing one. As we have seen, the last century of the Ancien Régime had seen the progressive erosion of both the epistemological and institutional certainties of the medical world. We have shown how the traditional hierarchy had been undermined by the rise of surgery and the relative stagnation of physic. We have shown too how, within the core of the medical community, those physicians who remained defenders of the corporative status quo were increasingly under attack from optimistic and enthusiastic

[60] See above, Chs. 7–9.

[61] For a discussion which places medicine in the context of other branches of higher learning, see Brockliss, *French Higher Education*, esp. 436–43; and cf. L. Wilson, *Women and Medicine*, 108 ff.

[62] *Remontrances des malades de Paris*, esp. 65 f., 74 f.

[63] *Extrait des registres de la Faculté de Médecine de Paris* (n.p., n.d.), 3. Evidently, this 'document' is a spoof.

supporters of, on one hand, a more bureaucratic, statist reorganization of medicine, and on the other a more commercializing, free-market approach. Mesmerism highlighted and exacerbated some of these fissures within the medical community. The pro-mesmerist author of the *Remontrances des malades de Paris*, after contemptuously inventorizing the list of fashionable pills, powders, and waters which Parisian practitioners had been peddling for a decade, cynically summarized: 'there is scarcely a single physician who does not have among these medicines a favourite for which he has a predilection and which he elevates above all the others. These medical elevations follow the destiny of the court and are even subject to the empire of fashion.'[64] The critique emerging from the mesmerist camp thus linked up with the more general attack during the 1780s, which we analysed in Chapter 12, on the commercialism and corruption spawned by court position and hidden beneath the colours of the Royal Society of Medicine. In so doing, it helped create a new fissure in the medical world, based on a radical rejection of almost all forms of medical hierarchy.

Mesmerism thus contributed to the opening up of an arena in which a new cultural politics could be played out, over issues involving questions of power, knowledge, health, and human bodies. As the quotation in the previous paragraph suggests, the movement fashioned a three-pronged attack on corporative, court, and commercial medicine. The (invariably corrupt) court physicians and unscrupulous medical entrepreneurs (so many 'speculators in health')[65] joined the outdated and obscurantist defender of the corporative system as the enemies of the common weal. This attack was moreover increasingly justified in the name of a diffuse but cogent patriotism. The corruption and commercialism inherent in the structures of medical practice were so many arrows aimed at the heart of the people. The only guarantee against professional abuse of the public seemed to lie in the civic spirit of every good-hearted practitioner. Mesmer might be charged with charlatanism, but were not anti-mesmerist medical men who claimed scientific status and practical efficacy even more lacking in good faith than he? Both Mesmer and his opponents shared, it would seem, the emperor's new clothes.

Louis-Sébastien Mercier, that touchstone of Parisian pre-Revolutionary public opinion, was characteristically pertinent on the subject. He ruefully admitted that contemporary medicine was 'less murderous' than formerly, but, with his penchant for systematic distrust of established power and all its works, tended to downplay orthodox medicine and play up the virtues of the medical penumbra. Of empiricism he stated, 'I believe it basically no more dangerous than medicine with its formulas and its theses.' 'How much do physicians owe to empirics!' he also exclaimed. 'While the former consume themselves in systems, the latter by

[64] M. A. J. B. M. Guénet, *Éloge historique de Michel-Philippe Bouvart* (Paris, 1787), 68.
[65] Ibid., for *agioteurs de santé*.

tradition and experience have remedies which by making cures disconcert the vain erudition of the faculties.'[66] He declared himself a firm believer in animal magnetism. The hostility of the faculties for mesmerism was sufficient reason for him wagering odds of ten to one that mesmerism was more correct than the Paris Faculty.[67] In this contest of good and bad faith, unmistakably Rousseauian tones began increasingly to make themselves heard. 'There is no nobler nor more useful profession', noted pro-mesmerist Thomas d'Onglée, 'than medicine. The particular interest of him who practises it is imperceptibly tied up with the general interest. A physician must, above all, be a good citizen [*être citoyen*].' If medicine seemed such an unstable vortex of interest and fashion, at least sincerity and popular commitment could provide a criterion of good faith.[68]

There was much, of course, that was laughable and laughably paradoxical about these claims emerging from the mesmerist camp. Patriotism seemed to be being championed by the supporters of the most cosmopolitan of medical adventurers. Mesmerists attacked physicians, though their leader was one himself. They claimed to be letting Nature do its work, but practised an exceptionally interventionist therapy. Mesmer, the putative scourge of court medicine, had moreover owed much of the success he had enjoyed to court favour, and a number of his most influential followers were securely encysted within the royal medical household. The anti-corporatism of the later Mesmer sat ill alongside the eager rush for corporate endorsement at academy level in his early days in Paris. And the opponent of commercialism had proved himself one of the most successful medical entrepreneurs of the eighteenth century. What had transmuted mesmerist dross to gold, however, was the support the movement managed to secure among a public increasingly critical of existing institutional and epistemological structures of authority. The politicization of health seemed to raise a question mark against the scientificity of medicine.

C. The Destruction of the Old Medical World and the Apotheosis of the 'Citizen-Savant'

The French Revolution is conventionally accorded high prominence in histories of medicine. The Paris-based hospital programme of teaching and research established in 1794, grounded in the unification of medicine and surgery and with a strong stress on pathological anatomy, is seen by many historians as establishing the origins of modern medical science.[69] Although we have argued that

[66] *Tableau de Paris*, i. 304, ii. 207, ii. 100.
[67] Ibid. xii. 352, ii. 100.
[68] d'Onglée, *Rapport au public*, 28 f.
[69] See above, Introd.; E. W. Ackerknecht, *Medicine at the Paris Hospital, 1794–1848* (Baltimore, Md., 1967); Foucault, *Birth of the Clinic*; and J. E. Lesch, *Science and Medicine in France: The Emergence of Experimental Physiology, 1790–1895* (Cambridge, Mass., 1984).

the so-called birth of the clinic had important antecedents within Enlightenment medicine which have been underrated, we would not wish to deny the importance of change produced by the Revolution in nineteenth-century developments—in French history as well as within medicine.[70] Legislation forged in these years provided the framework in which medicine was to be practised throughout the nineteenth century and in many respects up to the present day. The period also saw the destruction of the old corporative community of medicine and science, and the establishment on its ruins of forms of medical instruction and organization which became the basis for all developing states in the nineteenth century, and provided in some respects the raw materials of medical science.[71] Despite the background of the last years of the Ancien Régime in which a developing politics of health and health care had seemed to interrogate the scientificity of medicine, moreover, this change would bring about the more or less accepted elevation of medicine to the status of a science. Though the issue of health remained at some level a political agendum throughout the period of the gestation of the modern welfare state, medicine was to a very considerable extent lifted above the hurly-burly of conventional politics.[72]

As we have seen, by 1789 a new cultural politics of health had emerged which placed both the organization of medicine and, thereby, the health of the nation under scrutiny. Four competing agendas for the reform and what we can perhaps start to call the professionalization of medicine were being promoted and diffused both within but also without the medical world. Though looking increasingly archaic and irrelevant, the corporative model on which the Ancien Régime polity was founded still attracted many supporters,

[70] There is no completely satisfactory book on the impact of the Revolution on the medical world. Besides Foucault, see J. C. Sournia, *La Médecine révolutionnaire, 1789–1799* (Paris, 1989), and the works cited in n. 71, below. See too M. Ramsey, *Professional and Popular Medicine in France, 1770–1830: The Social World of Medical Practice* (Cambridge, 1988); J. Goldstein, *Console and Classify: The French Psychiatric Profession in the Nineteenth Century* (Cambridge, 1987); and L. W. B. Brockliss, 'Medical Reform, the Enlightenment and Physician-Power in Late Eighteenth-Century France', in R. S. Porter (ed.), *Medicine in the Enlightenment* (Amsterdam, 1995).

[71] For the 19th cent., see the recent monograph of O. Faure, *Les Français et leur médecine au XIXe siècle* (Paris, 1993), and the *œuvre* of the late Jacques Léonard, notably his *La Médecine entre les savoirs et les pouvoirs: Histoire intellectuelle de la médecine française au XIXe siècle* (Paris, 1981), *La Vie quotidienne du médecin de province au XIXe siècle* (Paris, 1977), *La France médicale au XIXe siècle* (Paris, 1978), and *Médecins, malades et société dans la France du XIXe siècle* (Paris, 1992). Helpful too are the comparative angles opened up by M. Ramsey, 'The Politics of Professional Monopoly in Nineteenth-Century Medicine: The French Model and its Rivals', in G. Geison (ed.), *Professions and the French State, 1700–1900* (Philadelphia, 1984).

[72] For this aspect of the 19th-cent. medicine, see H. Hatzfeld, *Du paupérisme à la sécurité sociale* (Paris, 1971); M. L. Hildreth, *Doctors, Bureaucrats and Public Health in France, 1888–1902* (New York, 1987); and P. Weindling, 'The Modernization of Charity in Nineteenth-Century France and Germany', in J. Barry and C. Jones (eds.), *Medicine and Charity before the Welfare State* (London, 1991).

especially at the top of the medical pyramid. More vociferous by 1789, however, were those who argued for a state-driven bureaucratization of medical practice in the spirit of medical police. Also making their voices heard were those who, on a different tack, had invested in the 'great chain of buying' and supported a more commercialized structure and ethos of openness and publicity for health care. Whereas the corporative and statist agendas prized medical expertise, the commercial model often tended to give priority to public acclaim over and above more purportedly hidebound versions of medical authority. The same was true of the fourth and final agenda, the radical patriotic stance, with its feet solidly in the post-mesmerist camp. Though proponents of each of the four models used the languages of publicity, social utility, and patriotism, this final agenda was strongly identified with the prizing of civic spirit above all else.

The Revolution was to nurture the process of politicization by allowing these competing versions of collective medical identity to pass from the discursive arena into legislative form. These pre-existent discourses provided the matrix in which medical reform was implemented by successive governments. What emerged from the process was to be very strongly conditioned by the complex politics of medicine sketched out before 1789. We can here only offer the briefest of sketches of how this happened. Although our focus will be on institutional and pedagogical developments, we do not want the reader to lose from sight, first, the role which medical men played in every aspect of the political and medical changes of this era. Though some medical men were found in the ranks of the counter-revolution, and even more sought quiet and respite away from public affairs, a good solid phalanx of medical men took their place alongside other middle-class professionals—lawyers, teachers, clerics, administrators—in the vanguard of what, we would argue, it is still appropriate to call a bourgeois revolution.[73] This was true, as L. Hunt has demonstrated, at local and regional levels, and at the national level too. A solid core of medical men, primarily physicians, sat in each of the legislative assemblies of the 1790s. They agreed on much, and, like other such groupings, disagreed too on some of the most major issues: the forty-nine medical deputies who voted on the death of Louis XVI in the National Convention in January 1793 divided roughly fifty-fifty over his fate.[74]

[73] For an earlier attempt to examine the professions in the origins of the Revolution in a way which highlighted the contrasting impact of civic and corporative versions of professional values, see C. Jones, 'Bourgeois Revolution Revivified: 1789 and Social Change', in C. Lucas (ed.), *Rewriting the French Revolution* (Oxford, 1991).

[74] Twenty-two out of 49 voted for the death penalty, according to Léonard, *Médecine entre les savoirs et les pouvoirs*, 18. For professional involvement in politics, see L. Hunt, *Politics, Culture and Class in the French Revolution* (London, 1986), esp. ch. 5, 'The New Political Class'. There are useful gleanings too in D. M. Vess, *Medical Revolution in France, 1789–1796* (Gainesville, Fla., 1975), esp. ch. 3.

'Who then should denounce tyrants to mankind if not the doctors ... who each day contemplate the human miseries that have no other origin but tyranny and slavery?' As this quotation from physician François Lanthénas (1754–99), deputy in the National Convention, suggests, medical men, who comprised a core element within the revolutionary bourgeoisie, also acted to give the language of political revolution a strongly medical hue.[75] If, as we shall see, medical institutions could be tarred with the absolutist brush, the converse had long been true, and absolutism assailed in medical imagery. Medicine had provided a political language and the body a rich source of metaphorical transference for the critics of the Ancien Régime. Louis-Sébastien Mercier, with his dark prognostications about corrupt political factions ruining public health and engendering a diseased environment, was an eloquent case in point.[76] Mesmerism had also, as we have suggested, with its Rousseauian overtones of the natural and the general, played a key role in the burgeoning critique of medical institutions in particular and the structure of the polity in general, and had helped to medicalize the political vocabulary of revolution. The Revolution was seen by many as a healthy, cathartic resolution after the maladies of the Ancien Régime: ' "I feel better since the Revolution", we hear said, to their credit, by many people', noted Montpellier graduate Philippe Pinel in the *Gazette de santé* in 1789, and Pinel was not the only voice to celebrate 'the salubrious effects of the progress of liberty', and to hold that the Revolution had effectively solved the nation's problems of health on both individual and collective levels.[77] In fact, political maladies did not go away in 1789: the Revolutionary process could thus be figured as much as continuing sickness as effective cure. Throughout the Revolutionary decade, political issues would thus be approached through a medical language of crisis and resolution: 'regime', 'constitution', 'degeneration', 'regeneration', 'convulsions', and 'purges' were all medical terms which did distinguished service in the Revolutionary lexicon throughout the decade. 'Charlatanism' too, a term which had cut its semantic teeth in the cause of medicine, was extremely widely used to designate and condemn any ascribedly interested, perfidious assault on the collective good faith of the nation.[78]

That the term 'charlatan' was so generally and so widely used over the

[75] Cited in N. R. Gelbart, 'The French Revolution as Medical Event: The Journalistic Gaze', *History of European Ideas*, 10 (1989), 417–27.

[76] See above, Ch. 12, Sect. F.

[77] Cited in Gelbart, 'French Revolution as Medical Event', 420.

[78] Besides its use for medical irregulars, one notes its widespread use to designate the clergy, corporate bodies of academics (cf. e.g. Marat's *Les Charlatans modernes* (1791)), the king and court and so on. As C. and M. Frey show, the term was broad enough to encompass the excoriation of professional Ancien Régime diplomacy too: ' "The Reign of the Charlatans is Over": The Revolutionary Attack on Diplomatic Practice', *Journal of Modern History*, 65 (1993), 706–44.

Revolutionary decade highlighted the recurring contentiousness of all issues of sincerity and good faith. It also contrasted with the sunnier, confident days of 1789 at the outset of the Revolutionary process. The *cahiers des doléances* ('books of grievances') which the inhabitants of every parish (and every vocational grouping) were enjoined to draw up as part of the calling of the national Estates General, showed a consistent desire for better and especially more health provision: hospitals and aid-posts (*bureaux de charité*) in the countryside; more competent practitioners, more widely diffused throughout the kingdom; tougher checks on quacks; and better protection against environmental threats to health.[79] Structural change in the provision of health services seemed not to be on the nation's agenda. Medical men themselves were, it is true, a little more exigent, apothecaries and surgeons especially so.[80] They also were keen participants in the campaigns for reforms initiated in 1789 and 1790 by the need to restructure the French state. But the tone of these highly diverse early offerings was still optimistic and open, and the contradictions and conflicts implicit within the competing set of agendas for medical organization with which the Ancien Régime ended had not yet surfaced.

The call for freedom and humanity which was at the centre of the Revolutionary discourse shaped over the summer crisis of 1789, and which found full expression in the 'Night of 4 August', in which feudalism (incidentally including under this label many aspects of corporatism) was abolished, and the decree of 26 August 1789 elucidating the Rights of Man and the Citizen, resonated variously with the pre-Revolutionary agendas for medical change. One pamphlet which appeared at the height of the constitutional crisis of 1789, entitled *Cri de l'humanité*, seemed highly representative of the somewhat lachrymose tone of social protest in 1788–9: it was only when one opened it that one realized it was in fact an advertisement brochure for a charlatanesque syphilis remedy![81] Such a pamphlet highlighted the shot in the arm which 1789 gave to entrepreneurial ingenuity. At its inception, the Revolution boosted the forces for commercialism and publicity in medicine, in direct proportion to the vehemence of its attack on the corporatism which had been the soul of the Ancien Régime polity. Just as there would be Bastille buttons and tricolour waistcoats being aggressively marketed, so there now would be a profusion of patriotic remedies.[82] Professional freedom, which seemed implicit in the equality of rights enshrined in 1789, was established by the Allarde Law of 2 March 1791 which formally abolished all trade associations and guilds. The natural right to practise any trade was now

[79] C. Bloch, *L'Assistance et l'état à la veille de la Révolution, 1764–1790* (Paris, 1908), 411 ff.

[80] J. P. Goubert and D. Lorillot, *1789, Le Corps médical et le changement* (Toulouse, 1984).

[81] Its author was Antoine Andrieu, a supporter of Goderneau powders. (See above, pp. 635, 662.) He also penned a *Supplément au Cri de l'humanité* (Paris, 1790).

[82] For e.g. 'Neckerite' health pills, see above, p. 661.

established openly to all who would pay the industrial tax entitled the *patente*. Government rulings in early 1792 stipulated that even *orviétan*-sellers, ballad-sellers, and showmen (*marchands d'orviétan, marchands de chanson, et montreurs de curiosité*) were covered by this right to trade.[83] Already, in legislation passed on 31 December 1790 and 7 January 1791, 'invention certificates' (*brevets d'invention*) had been established, along lines which, though far freer of course, seemed to owe something to the old system for regulating proprietary medicines under the Ancien Régime: any individual could register an invention, and rights of exploitation and distribution throughout the realm were accorded on payment of a 300 *livres* registration fee.

The values of freedom and openness central to the Revolution thus had the effect of lifting the shackles from the commercial medicine sector which had developed strongly, but within the interstices of the Ancien Régime state. A free field was thus established for the practice of medicine over which no Ancien Régime institution could now claim legitimate authority. This seemed to spell death to the rationale of corporatism and also the very concept of medical policing—surveillance and censorship of remedies, individuals, knowledge, advertisements, books, or whatever—and its diverse agencies (Royal Society of Medicine, Paris Faculty of Medicine, the Academy of Sciences, the Paris *lieutenant général de police*, etc.).[84] Advertisement now fell under the aegis of constitutionally guaranteed freedom of speech. The only vestige of the old policing agencies was the Paris College of Pharmacy which was specifically exempted from anti-guild legislation, presumably because the idea of *laissez-faire* in the production and distribution of poisons was too worrying to accept. The pharmacy organization continued to operate throughout the 1790s—albeit not at all effectively as regards the policing of remedies.[85] With the powers of all other policing bodies in seemingly terminal discredit, and the individuals who had served them represented as so many physician-aristocrats,[86] the penumbra of the Ancien Régime medical world now had an

[83] See AN H2 2103 (letter of 29 Apr. 1792). The stipulations of the Allarde Law were buttressed by the more famous Le Chapelier Law of 17 June 1791 forbidding workers' coalitions and associations.

[84] Cf. above, Ch. 10, Sect. C. On the linked issue of Revolutionary copyright law, which mythologized the inventor, according him the 'Rights of Genius', see Hesse, *Publishing and Cultural Politics*, ch. 3.

[85] B. Dehillerin and J. P. Goubert, 'A la conquête du monopole pharmaceutique: Le Collège de Pharmacie de Paris, 1777–1796', *Historical Reflections/Réflexions historiques*, 9 (1982), 233–48.

[86] An accusation against the Royal Society of Medicine, cited in M. Ramsey, 'Property Rights and the Right to Health: The Regulation of Secret Remedies in France, 1789–1815', in W. F. Bynum and R. Porter (eds.), *Medical Fringe and Medical Orthodoxy, 1750–1850* (London, 1987), 102. For background to the 'free field' in medical practice, Ramsey's *Professional and Popular Medicine* is essential: see esp. 72 ff. For the situation in the capital, see too D. B. Weiner, *The Citizen-Patient in Revolutionary and Imperial Paris* (Baltimore, Md., 1993).

unrivalled opportunity to strike back against its perennial opponents in the core of the corporative community.

Strike back it did. As the core of the old medical world collapsed under the onslaught of the long-repressed penumbra, the 1790s came to constitute probably the most genuinely free and open market-place for commercialized remedies in modern French history. Many a fortune was made, by entrepreneurs old and new. The anti-syphilitic *rob Laffecteur* ensured its enduring fame, winning lucrative contracts for servicing health provision within the navy and the army.[87] Ex-court physician (and ex-Bastille incumbent) Pascal Faure de Beaufort started marketing once again, and, to patriotic acclaim, his *eau anti-putride* (which prior to the Revolution the Royal Society of Medicine had proclaimed a dangerous fraud).[88] So unrestrained was the market indeed, that ripples of anxiety and concern were not long in making themselves felt, in spite of the end of corporative hierarchy and the discrediting of medical policing. Fear of the damage being done to the health of the nation by medical charlatans soon became a leitmotiv in debate, and an unremitting stimulus to medical reforms. There was, moreover, no shortage of reform proposals and packages.

The razing of historically ordained and prescriptive privilege in 1789 made a defence of corporatism pure and simple almost impossible. Significantly, the Paris Medical Faculty—apex of the pyramid of medical privilege under the Ancien Régime—could no longer base the defence of its rights in terms of historical precedent and custom, and had to rely solely on arguments from public utility. Thus it eschewed any pretensions to medical policing, but urged the continuation of its status as a teaching institution separate from and superior to that of other medical colleges as well as all surgical institutions on the grounds of the professional superiority of Paris physicians, and the need to allow an institution grounded in medical superiority a clear precedence over the more manual arts practised by surgeons. This was a position, surprisingly perhaps, which the Academy of Surgery tended to back: senior members feared the dilution of surgical skill and institutional gains if medicine and surgery were merged.[89]

Voices urging root-and-branch reform were also heard, both outside and inside the core institutions of the manifestly decaying vestiges of the old corporative medical community. In particular, the National Assembly's establish-

[87] See the dossier of pamphlets on Laffecteur at BL FR430, and esp. Laffecteur, *Recueil de recherches d'observations sur les différentes méthodes de traiter les maladies vénériennes et particulièrement sur les effets du remède connu sous le nom de Rob anti-syphilitique* (Paris, Year III [= 1795]). See also L. W. B. Brockliss, 'Making a Killing Out of the Nation in Arms: Marketing a Venereal Therapy in the 1790s', unpub. paper.

[88] See above, p. 651; J. Guillaume (ed.), *Procès-verbaux du Comité d'Instruction publique de la Convention nationale* (6 vols., 1891–1907), iv. 271; and ASRM 201.

[89] T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (London, 1980), 160 ff.

ment in 1790 of a Mendicity Committee (Comité de Mendicité) with the remit of reorganizing poor relief and hospital care, and a Health Committee (Comité de Salubrité), targeting reform of medical education, ignited debate. Amid the wave of projects and pamphlets which appeared, the intellectual running was set by these two committees. The duc de La Rochefoucault-Liancourt, egregious chair of the Mendicity Committee, devised an extraordinarily ambitious and far-reaching welfare programme along rational lines and in the spirit of the equality of opportunity at the heart of the Revolutionary project.[90] Taking its cue from the Douai-trained physician Taranget, correspondent of the Royal Society of Medicine, that the poor's very 'existence was to some degree a chronic sickness',[91] it made health care integral to broader welfare provision. Significantly, however, the Committee also followed the lines of argument popular in non-medical circles in the last years of the Ancien Régime concerning the need to dehospitalize society, and urged the drastic reduction of the number of hospitals to deal with urgent and eminently medicable cases only. The bulk of care which formerly had taken place within hospitals should now, it was held, be delivered in the form of home relief. The sale of hospital endowments would allow extensive aid to be provided in the pauper's home, and this should include medical treatment. Given the uneven geographical coverage of the medical community, the Committee urged that salaried physicians and surgeons should be established in rural areas, to deliver care which was 'prompt, free, assured and complete'.[92] The proposal for a salaried network of physicians—which conformed to a suggestion already made in 1789 by the medical journalist and polemicist Noel Retz—encompassed better surveillance of midwives and emergency care in time of epidemic, in accordance with the humanitarian (and populationist) concerns inherited from the Ancien Régime.[93]

The latter point was also at the heart of the recommendations of the Assembly's Health Committee (which in some respects nurtured something of a rivalry with the Mendicity Committee).[94] Its reports were firmly based, moreover, on

[90] C. Bloch and A. Tuetey (eds.), *Procès-verbaux et rapports de la Comité de mendicité de la Constituante, 1790–1791* (Paris, 1911). For discussion, see Weiner, *Citizen-Patient*, introd.; and id., 'Le Droit de l'homme à la santé: Une belle idée devant l'Assemblée nationale constituante, 1790–1791', *Clio Medica*, 5 (1970), 209–23. The best overview of charity and poor relief in the Revolution is A. Forrest, *The French Revolution and the Poor* (Oxford, 1981). See too C. Jones, *Charity and 'Bienfaisance': The Treatment of the Poor in the Montpellier Region, 1740–1815* (Cambridge, 1982), esp. ch. 8.

[91] Cited in J. P. Peter, 'Les Mots et les objets de la maladie: Remarques sur les épidémies et la médecine dans la société française de la fin du XVIIIe siècle', *Revue historique*, 246 (1971), 33.

[92] Cf. Weiner, *Citizen-Patient*, 86; and above, Ch. 7, Sect. F.

[93] N. [Retz], *Nouvelles ou Annales de l'art de guérir*, iv. 397 ff. (the article was also published separately as a pamphlet). Cf. Gelbart, 'French Revolution as Medical Event', 421 ff.

[94] Sournia, *Médecine révolutionnaire*, 96 ff. For the Committee's work, see H. Ingrand (ed.), *Le Comité de salubrité de l'Assemblée nationale constituante (1790–1791)* (Paris, 1934); and T.

the proposals made to it by the Royal Society of Medicine in the person, and under the firm editorial and authorial hand of the Society's secretary, Vicq d'Azyr. Vicq had in 1788 succeeded premier physician Lassone as Queen Marie-Antoinette's personal physician (she playfully dubbed him 'mon philosophe'), and this seemed to put him in the strongest position imaginable for continuing the Society's drive towards state-based medical police. In the event, the impact of the Revolution had been, as we have seen, to undermine the bases of statist approaches in favour of more classically liberal solutions. Vicq rolled with the punches, and in his *Nouveau Plan de constitution pour la médecine en France* (1790) launched a surprisingly scornful attack on court medicine in all its forms. The *Nouveau Plan* comprised probably the most intellectually capacious and imaginative reform plans to emerge from this stage of the Revolutionary debate.[95] Though he went along with the call for a stipendiary group of physicians servicing the health needs of the rural population, and roundly attacked the limitations of corporative medical organization (of which he had of course formerly been a principal beneficiary), Vicq rejected the radical agendas for medical change, which made of public opinion a sure guide to medical veracity. He had learnt from the mesmerist farrago not to rely on the public's views as a criterion of medical validity.[96] Characteristically, therefore, he held on to the view that some form of authorization of proprietary remedies be maintained: the free field in medical entrepreneurialism risked becoming a recipe for unscrupulous charlatanism. Vicq proposed instead that owners of such remedies should have them purchased by the state, which should then render the composition public.

The most powerful element in Vicq's, and the Health Committee's programme for change was the unification of physic and surgery within an integrated national system of medical training and provision. Medical education was to be modelled on the kinds of extracurricular training which surgeons had been undergoing prior to 1789, and which pioneers across the face of Europe from Edinburgh to Vienna had also been proposing: namely, hospital-based, emphasizing bedside observation and practical, hands-on learning. The old distinction between external and internal care no longer carried any conviction in the light of scientific advances and the drift of best-practice medical training in

Gelfand, 'Medical Professionals and Charlatans: The *Comité de Salubrité Enquête* of 1790–1791', *Histoire sociale/Social History*, 11 (1978), 62–97.

[95] The *Nouveau Plan* was issued as a pamphlet, but is also included in the *Histoire et Mémoires de la Société royale de Médecine: Années 1787 et 1788*, 9 (1790). For a helpful discussion, see C. Hannaway, 'Caring for the Constitution: Medical Planning in Revolutionary France', *Transactions and Studies of the College of Physicians of Philadelphia*, 5th ser. 14 (1992), 147–66. Cf. Brockliss, 'Medical Reform, the Enlightenment and Physician-Power', 69 ff.; Gelfand, *Professionalizing Modern Medicine*, 158 ff.; and Weiner, *Citizen-Patient*, 93–6.

[96] See Vicq d'Azyr, 'Idée générale de la médecine', in id., *Œuvres*, ed. J. L. Moreau de la Sarthe (6 vols.; Paris, Year XIII [= 1805]), v. 56.

Europe. Furthermore, only unified training could produce the kind of general practitioner required in the countryside as rural physicians. Planned curriculum reform was extensive too. Anatomy lay at its core, and courses in the physical and chemical sciences were also incorporated, as was hygiene: Vicq felt that environmental medicine worthy of the name had never been properly practised in French faculties. There was, however, a price for the production of such useful *médecins praticiens*: Vicq accepted that this kind of blue-chip education should only be available to an élite, who would attend one of five national schools; the health needs of the rest of the population would be met by individuals less high-flying in their training who would have a local ambit of operations. These would also be hospital-trained in locations where suitable facilities existed, which would be certified at departmental level to cope with the (less complicated) health needs of the peasantry.

There were a number of fields of endeavour in which the Revolutionary assemblies, generally so fertile in the implementation of initiatives, were longer on words than action: education and poor relief were prominent among them. The ambitious plans of the Mendicity and Health Committees, which would have utterly revolutionized the practice of medicine in France, were shelved. The projects of Vicq and the Health Committee made it into the major educational programme introduced by Talleyrand for the Education Committee in September 1791 in the last days of the Constituent Assembly: but this was never implemented. The drift of the Revolution—and in particular, the growing process of political dichotomization, which climaxed in France's embarking on war with Europe from spring 1792, and then the overthrow, trial, and execution of Louis XVI in the autumn and winter of 1792–3—brought more urgent matters to the top of the agenda. As the road to political terror opened up, the more liberal options for change in medical institutions voiced in 1789–91 were seriously undercut. Symptomatic of change was the way in which the medical agenda was increasingly set by general political preoccupations, notably a hostility to aristocracy in all its forms.

The term 'aristocrat' was now used capaciously to include any beneficiary of prior hierarchical organization. The pyramid of learning under the Ancien Régime was conflated with the social hierarchy, so that any well-connected and corporatively-based practitioner could be viewed prima facie as an aristocrat and therefore a political suspect. Physicians suffered most of all in this respect, but surgeons were not exempt: François Chaussier, who had both medical and surgical qualifications, in 1789 launched a scathing attack on the organization of surgery, and in particular the role of the premier surgeon, who from his niche at court exercised 'a form of hereditary despotism'.[97] Marat set the tone in his

[97] *Mémoire sur quelques abus dans la constitution des corps et collèges de chirurgie, et particulièrement sur l'abus des droits, prérogatives et privilèges attachés à la place de premier chirurgien du roi* (Dijon, 1789), 2.

pamphlet *Les Charlatans modernes* (1791): today's charlatans were yesterday's *charlatans académiques*. Academies were openly attacked for being merely 'powerful corporations, full of intrigues and cabals' and 'bewigged doctors paid dear for holding academic sessions'.[98] The world of science consequently endured some major sacrifices. A deputy speaking for the Education Committee in the Convention in December 1793, anathematized 'any idea of an academic body, scientific society, or pedagogical hierarchy', before concluding that 'free nations do not require a caste of speculative savants'.[99] Institutionally, all academies and learned societies formerly subsidized by the state had by then (since August 1793) closed down, though the activities of most had been by then long dwindling. Individually too there were severe losses. The still-independent Academy of Sciences had on 11 August 1792 (the day after the overthrow of Louis XVI) resisted demands of physician-academician Fourcroy to engage in a purge of its numbers to remove all 'aristocrats', but with the subsequent collapse of institutional autonomy, some of the most outstanding Ancien Régime scientists lost their lives as a result of the new political realities.[100] Lavoisier the chemist (and public health reformer) was guillotined, less for his scientific prowess than for the fact that he had been a hated tax-farmer prior to the Revolution. The astronomer Bailly too, one of only two individuals to be elected to three acad-emies (the Academy of Sciences, the Académie française, and the Académie des Inscriptions et Belles-Lettres), and, like Lavoisier, participant in the famous Mesmer committee, was executed, primarily for his deeds as mayor of Paris from 1789 to 1791, which by 1793 were adjudged anti-democratic. And the mathematician Condorcet, secretary of the Academy of Sciences, and author of some of the most ambitious plans for educational reform in the early 1790s, died by his own hand while in prison for political offences.

Given the fact that, in these circumstances, any initiative emerging from or associated with the royal court seemed to have suspect civic and patriotic credentials, the position of individuals who had had connections with the royal medical household was especially fragile.[101] Some former post-holders managed to wipe themselves clean of royalist stain: Marat, after all, had held a post attached to the comte d'Artois a decade or so before the Revolution erupted; Chambon de

[98] Citation in R. Hahn, *The Anatomy of a Scientific Institution: The Paris Academy of Sciences, 1666–1803* (Berkeley & Los Angeles, 1971), 182; and Jean-Baptiste Bo, *Rapport et projet de décret sur les bases de l'organisation générale des secours publics* (Paris, Year II [= 1794]) 8. The campaign of vilification can also be followed in J. Fayet, *La Révolution française et la science, 1789–1795* (Paris, 1960).

[99] Cited in F. Pontheil, *Histoire de l'enseignement, 1789–1965* (Paris, 1966), 70–1.

[100] On these developments generally, Hahn, *Anatomy of a Scientific Institution*, esp. chs. 7–9; Fayet, *Révolution et la science*; and C. A. Russell, *Science and Social Change, 1700–1800* (London, 1983), esp. ch. 7.

[101] Jones, '*Médecins du Roi*'.

Montaux joined the Paris Jacobin Club and even made it briefly to the post of mayor of Paris during the Terror. Others reacted more tepidly, either retiring from public life or leaving France altogether. A number even served in émigré armies, and one, Valentin Marie Magloire Chévetel (1758–1834), consultant physician to the comte de Provence in 1789, became a counter-revolutionary spy.[102] Others did all they could to rally to the patriotic cause. The later career and fate of Vicq d'Azyr was a kind of parable in this respect. The anti-hierarchical drift of Revolutionary politics had left the queen's pet *philosophe* personally and institutionally adrift: he failed to save his Royal Society of Medicine from the dissolution imposed on academies, while the imprisonment and then execution of his mistress, Queen Marie-Antoinette, made him seem even more bereft. The progress of the Terror made him consider internal exile, but in the end he chose to try to sit things out in Paris, attempting to maintain his patriotic credibility by accepting a number of humble intellectual chores—the painter (and Robespierrist) David got him nominated, for example, to a commission inventorying *objets d'art* throughout the Republic. Yet terminal illness was already stalking him. Legend was to have it that he fell fatally ill on witnessing the Festival of the Supreme Being in the summer of 1794 and that he died shuddering uncontrollably with the words 'le Tribunal révolutionnaire!' on his lips. 'They used to say at court that I was the accomplice of the *philosophes*,' he remarked in his last days, 'They say now that I was only a valet.'[103]

To stay safe amidst the collapse of the old community of learning and the stigmatization of even the scientific great and good, any former academician had to invent a republican virginity, and to dress up as a *citoyen-savant*. This could even be a literal dressing-up: the sporting of the Jacobin red bonnet, for example, was advisable. For all his undoubted goodwill and talent, Vicq d'Azyr had been far too invested in court favour and Ancien Régime corporatism to make this metamorphosis sufficiently convincing. Individuals like him, Lavoisier and the others represented the human fall-out from the thoroughgoing destruction of the Ancien Régime scientific (and medical) community begun in 1789. Universities were under attack too for their 'gothic', 'academic' ambience, and the activities of most dwindled to nothing. Although the move to abolish them on 15 September 1792 was reversed the following day, most had effectively ceased to exist and only a handful of medical faculties, aided by local connivance, managed to limp on through the Terror—notably at Montpellier, Caen, and Besançon.[104]

[102] Ibid. 245 ff.; Sournia, *Médecine révolutionnaire*, 239 ff.

[103] Guillaume (ed.), *Procès-Verbaux*, ii. 572 ff., 829 ff.; P. Delaunay, *Le Monde médical à Paris au XVIIIe siècle* (Paris, 1930), 158 f.; Jones, 'The *Médecins du Roi*', 249 f.

[104] e.g. L. Dulieu, 'La Vie médicale et chirurgicale à Montpellier du 12 août 1792 au 14 Frimaire an III', *Revue d'histoire des sciences*, 8 (1955), 38–52, 146–69; Sournia, *Médecine révolutionnaire*, 127 f. Universities were formally abolished by legislation on 25 Feb. 1795.

The downfall of the universities under the Terror formed part of an erasure not simply of the corporative world of the Ancien Régime but also of the temporary eclipse of the bourgeois public sphere which in the Enlightenment had constituted the framework for its critique. The abolition of academies and learned societies was significant here. Freemasonry's secretive aspects made it too politically suspect. Salons were despised—one of executed Girondin Madame Roland's greatest sins had been to try to be a political *salonnière*; the extraor-dinarily free press which had flourished from 1789 was from 1792 increasingly vetted for political correctness; the scientific press suffered too; and the more unbuttoned world of the coffee-house became subject to police spying. The Jacobin clubs which had expanded to fill the world of intellectual sociability were by 1793 becoming monotonal agencies of government support.[105]

At the trial of chemist and farmer-general Lavoisier before the Revolutionary Tribunal, the judge was alleged to have sneered that 'la République n'a pas besoin de savants'. However symptomatic this story (which is almost certainly apocryphal) may claim to be of the work of scientific destruction wreaked by the Revolution, and the Terror in particular, it tells only half the story. The Republic might have annihilated many of the beneficiaries and institutions of the old scientific and medical worlds, but it also drew extremely heavily on their expertise in the work of saving France from counter-revolution, foreign invasion, and possible partition. There was room for savants, but only citizen-savants. As naturalist (and son of a former *médecin du roi*) Louis-Augustin-Guillaume Bosc (1759–1808) noted, 'we must be a citizen before being a naturalist'.[106] The mid-1790s, which made *tabula rasa* of the old scientific community, also witnessed the beginnings of the process by which a new scientific community was created. A new statism emerged, focused not on the monarch—the latter's body no longer constituted the sacred centre of the polity—but on the sovereign nation.[107]

In 1793–4—Year II in the new Revolutionary Calendar—the sovereign nation lay under mortal armed threat. To counter it, the Robespierrist faction within the Jacobin movement pushed the National Convention into policies of Terror: centralization, authoritarianism, and the rallying of popular support (notably from the ranks of urban *sans-culotte* radicals). They extended this pro-

[105] J. B. Landes, *Women and the Public Sphere in the Age of the French Revolution* (Ithaca, NY, 1988), esp. 118–19, 145, 151; D. Outram, *The Body and the French Revolution: Sex, Class and Political Culture* (London, 1989), esp. 147 ff.; J. D. Popkin, *Revolutionary News: The Press in France, 1789–99* (Durham, NC, 1990), esp. ch. 4; and (though rather overstressed) F. Furet, 'Jacobinism', in id. and M. Ozouf (eds.), *A Critical Dictionary of the French Revolution* (Cambridge, Mass., 1989).

[106] Cited in Hahn, *Anatomy of a Scientific Institution*, 263. Cf. Jones, '*Médecins du Roi*', 222.

[107] The Tocquevillian resonance of this development needs to be seen in the context of the rather less clear-cut developments later in the decade, noted below, Sect. D.

gramme, moreover, to include the enlistment of those parts of the old scientific community which could offer useful expertise in the stuggle. 'Jacobin science' was grounded in the infant Republic's fight for its life.[108] The chemist Guyton de Morveau (1737–1816) sat on the Committee of Public Safety in its early days in 1793; the great Robespierrist version of the Committee in 1793–4 included in its ranks the military engineers Lazare Carnot (1753–1823) and Prieur de la Côte-d'Or (1763–1832); and the mathematician Monge (1746–1818) served as navy minister at the height of the Terror. Other citizen-savants placed their expertise at the disposal of the Republic to streamline and improve arms and munitions production, to collect and process saltpetre for gunpowder (the chemist-physicians Berthollet and Chaptal were especially involved in this), and to experiment with balloons in military intelligence-gathering. Scientists were also engaged in a number of initiatives in technical education.

The remnants of the old medical world were not exempt from this generous mood of pragmatic scientific voluntarism. Indeed, physicians and surgeons made a particularly direct impact on the Jacobin war-effort. France's war-machine was thoroughly revolutionized by the Revolutionary wars: it shifted from an élite corps of professionally trained career soldiers to a fairly unruly mass of troops mixing career professionals with large numbers of relatively untrained, but highly enthusiastic volunteers. Though the professional standards maintained by the vestiges of the old standing army should not be underestimated, the republican armies achieved what they did essentially through patriotic *élan* and sheer numbers: whereas the standing army before 1789 had reached a quarter of a million men, following the *levée en masse* of 23 August 1793 maybe up to a million and a quarter men were under the orders of the war ministry—most of them as potential combatants.[109]

In these circumstances, anyone with any measure of expertise in health care was expected to rally to the job of attending to the needs of wounded and dying *défenseurs de la patrie*, as soldiers were now routinely called.[110] Such dedication helped keep large numbers in the field but was also figured as an appropriate

[108] On this episode, besides Hahn, *Anatomy of a Scientific Institution* and Russell, *Science and Social Change*, see C. C. Gillispie, 'The *Encyclopédie* and the Jacobin Philosophy of Science: A Study in Ideas and Consequences', and L. P. Williams, 'Politics of Science in the French Revolution', both in M. Clagett (ed.), *Critical Problems in the History of Science* (Madison, Wis., 1962) (and see too the important reservations of H. Guerlac in a comment on the papers). Excellent too on the 1790s as a whole is N. and J. Dhombres, *Naissance d'un nouveau pouvoir: Sciences et savants en France, 1793–1824* (Paris, 1989).

[109] See S. F. Scott, *The Response of the Royal Army to the French Revolution. The Role and Development of the Line Army, 1787–1793* (Oxford, 1978); J. P. Bertaud, *La Révolution armée* (Paris, 1979); and J. A. Lynn, *The Bayonets of the Republic: Motivation and Tactics in the Army of the French Revolution, 1791–1794* (Chicago, 1984).

[110] On the military medical response to the crisis of Year II, see esp. Vess, *Medical Revolution in France*, ch. 6; P. Huard and M. Grmek, *Sciences, médecine, pharmacie de la Révolution à l'Empire,*

gesture of respect as well as a reward for answering the patriotic call. On 1 August 1793, three weeks ahead of the introduction of the *levée en masse*, all 'physicians, surgeons, pharmacists, and health officers' were placed at the disposal of the Revolutionary Government for the war effort. The way in which most responded won wide-ranging plaudits. Many medical men were directed towards the mushrooming military-hospital sector. Since the reports of the Mendicity Committee, governments had shown little time for or faith in the hospital as a social institution; but the crisis of Year II put the hospital, in a military guise, at the centre of its logistical concerns. Enormous amounts of money were spent on the military-hospital infrastructure, and local administrators were given extremely wide-ranging powers to confiscate potential supplies and conscript suppliers of useful services. Areas near the front felt the brunt, but localities far in the hinterland could also be dramatically affected: in the department of the Hérault centred on Montpellier, for example, military hospitals contained over 4,000 beds by September 1794: three times the pre-Revolutionary levels of civilian and military hospital beds combined.[111]

War mobilization had thus transformed medical and welfare priorities. If every soldier was now a 'citizen in arms', conversely every citizen was a potential soldier. The need to rally popular supporters who would allow themselves to be put in the military frontline pushed the Revolutionary Government into extensive social welfare projects, which marked a final flowering of the ethos of *bienfaisance* so characteristic of the Enlightenment: notably the final abolition of feudalism, a maximum on prices, and a new policy of state pensions for categories of paupers adjudged both needy and worthy. Some of the latter were targeted at military veterans, and the families of deceased *défenseurs de la patrie*,[112] but the civilian poor also benefited. Plans for a national indigence register (*Grand Livre de Bienfaisance Nationale*) were unveiled in May 1794 offering pensions to rural patriots and their families, extending aid to unmarried mothers, and incorporating plans for the establishment of three rural health officers per district, much on the lines of the recommendations of the Mendicity Committee.[113]

The war effort was, however, voraciously greedy for funds. The state pen-

1789–1815 (Paris, 1970); and D. B. Weiner, 'French Doctors Face the War: 1789–1815', in C. K. Warner (ed.), *From the Ancien Régime to the Popular Front: Essays in the History of Modern France in Honor of S. B. Clough* (New York, 1969).

[111] Jones, *Charity and 'Bienfaisance'*, 172–3; id., *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989), esp. ch. 6: 'The Welfare of the French Foot-Soldier from Richelieu to Napoleon', 225 ff.; and A. Forrest, *Soldiers of the French Revolution* (Durham, NC, 1990), 143 ff.

[112] See I. Woloch, *The French Veteran from the Revolution to the Restoration* (Chapel Hill, NC, 1979).

[113] Jones, *Charity and 'Bienfaisance'*, 176 ff.

sions were paid increasingly in arrears, the health officers often received no salaries at all, and the welfare mechanisms failed to materialize in many areas. Civilian hospitals, the centre-piece of Ancien Régime poor relief, were still desperately clinging on to existence. But government insouciance, the loss of income as a result of Revolutionary social legislation, and the frequent loss of their nursing staff consequent on anticlerical hostility to religious communities meant that they were increasingly unable to cope with the demand for aid. On 23 Messidor Year II (11 July 1794), all hospital property was nationalized. The assumption, in theory at least, was that the running-down of hospitals and the sale of institutional property would contribute towards the pensions-based welfare provisions of the Revolutionary Government. In fact, they were sunk into the war effort. National *bienfaisance* had to wait on the winning of the war.

Paradoxically, even as the government espoused the doctrine of the need to abolish civilian hospitals rather than reforming them—to dehospitalize society, in sum—the war mobilization was according a new and high-profile role to military hospitals for ailing *défenseurs de la patrie*. We have seen how, under the Ancien Régime, the military-hospital sector was the leading edge of clinical approaches to health care and to medical training.[114] In these new circumstances, they had a similar dramatic effect, proving a forcing ground for a more practically orientated bedside medicine to emerge. Given the practical utility of their skills, surgeons had since the time of Ambroise Paré held a dominant place in military medicine, and this was all the more the case in an age of total war and conscript armies. Moreover, the large numbers of physicians sent to the front had to be ready to behave like surgeons if they wished to be accounted good citizens. Furthermore, the conditions of the massive call-up of Year II subjected surgeons and physicians alike to conditions in which the two skills could be more effective if used complementarily. Conditions in military hospitals were as likely as not to be so appalling that amputation and radical surgery was an advisable option: Dominique-Jean Larrey (1766–1842), who would go on to fame as Napoleon's surgeon-general, urged amputation as better than prolonged convalescence in a military hospital, where the individual might end up dying of cross-infection.[115]

The experience of the military medical machine thus made the old hands-off observationalism a luxury which patriotism could not afford. Yet it also, contrastingly, showed that amputative surgery by itself was rarely enough: even surgeons had to acknowledge the crucial importance of better measures of hygiene

[114] See above, Ch. 11, Sects. C–D. While not in any way denying the importance of the war emergency of 1793–4 in contributing to changes in medical organization, we do not wish to go as far as Vess, *Medical Revolution in France*, who makes this the major cause of the birth of the clinic.

[115] Huard and Grmek, *Sciences, médecine, pharmacie*, 59 ff.; and L. R. M. Brice and M. Bottet, *Le Corps de santé militaire en France: son évolution, ses campagnes, 1708–1882* (Paris, 1882), 243.

and routine medication. Medical staff spent less time on battlefield surgery than on everyday efforts to keep hospitals, garrisons and camps free from epidemic disease. The Revolutionary medical officer had thus to be half surgeon and half medical topographer. If physicians had to learn from surgeons the importance of interventionism, surgeons had to go to school with physicians so as to become better environmentalists. As we shall see, one of the most important legislative measures to emerge from the Revolutionary period would be the unification of medicine and surgery. The experience of war—for a whole generation of medical practitioners and a massive cohort of trainees—had made that unification a mundane experience before even as it was becoming a legislative fiat.

D. Restructuring the Medical World for the Nineteenth Century

War would continue to preoccupy France from the mid-1790s down to the restoration of the Bourbon monarchy in 1815. Yet a number of the other characteristics of 'Jacobin science' and 'Jacobin medicine' shifted out of the frame from the middle of the 1790s onwards. The enthusiastic patriotism and the enlistment of relevant forms of technical expertise was even by the middle of 1794 beginning to do its job: counter-revolution within France had been checked, foreign armies driven from French soil. With the military threat exorcized, the Republic emerged proof against invasion and constitutional overthrow. A first casualty of change was the social alliance spatchcocked together in the war emergency: as the military threat receded, it cracked asunder. The overthrow of Robespierre and his followers in the *coup d'état* of 9 Thermidor Year II (27 July 1794) signalled the neutering of the aggressive street radicalism of the *sans-culotte* movement, which had helped drive the alliance forwards.[116] Greater military efficiency made *sans-culotte* support dispensable, and the post-Thermidor period witnessed a shift away from many of the most radical social measures put in place under the Committee of Public Safety.[117] Hospital closures ended, and their property was denationalized; the *Grand Livre de Bienfaisance Nationale* was allowed to run down, as plans for a national welfare state were definitively shelved; the rural health officer programme ran into the sand; and military welfare projects lost their urgency. The comprehensive plans of welfare reform shrank in the harsh light of the 1790s into far more circumscribed initiatives. A call went out for the resuscitation of private charity. The

[116] The alliance of Jacobinism with the Paris *sans-culotte* movement was falling apart long before Thermidor: R. C. Cobb, *The Police and the People: French Popular Protest, 1789–1820* (Oxford, 1970).

[117] On this theme, see C. Jones, 'Picking Up the Pieces: The Politics and the Personnel of Social Welfare from the Convention to the Consulate', in G. Lewis and C. Lucas (eds.), *Beyond the Terror: Essays in French Regional and Social History, 1794–1815* (Cambridge, 1983).

macro-level was abandoned for the micro-level. Schemes for hospital improvement (rather than abolition), smallpox vaccination, technical schools, prison reform, lunatic asylums, soup kitchens, and the like now attracted attention. Many of them had a strong medical element—proof that the extension of the medicable was continuing—but lacked the vision and ambition of the earlier comprehensive schemes.[118]

Even prior to this retreat from its earlier positions on social policy, however, the National Assembly had signalled a rethinking of its open-door policy towards health care, and in particular the sufficiency of patriotic *élan* as a guide to an effective health policy. In December 1794 Fourcroy presented a report in the Convention which had originally been commissioned by the Committee of Public Safety in July 1794 and which called for the establishment of three *écoles de santé* (health schools) in Paris, Montpellier, and Strasburg. The avowed motive behind the measure conformed with the existing political conjuncture: some 600 health officers (*officiers de santé*) were said to have lost their lives in the military medical services since late 1793, and they desperately needed replacing if the health of worthy *défenseurs de la patrie* was to be assured. Fourcroy was still sufficiently enamoured of the existing free field of medical services to declare that '*laissez-faire* is the great secret and the only road to success', and the schools were not accorded a monopoly of teaching or practice. Yet in an ominous sideswipe, he also fulminated against the way in which 'murderous empiricism and ignorant ambition everywhere hold out traps for credulous pain'.

Rejecting the re-establishment of the 'aristocratic' and 'unpractical' teaching institutions of the Ancien Régime, Fourcroy planned the new institutions to be meritocratic, democratically charged, ultra-practical, and truly national in the training they offered.[119] Their prime target was the production of effective health officers for the armed forces. However, the fact that the new institutions were entitled schools of health rather than of medicine highlighted the assumption that the welfare of the nation was also engaged in the project.[120] The breadth of the curriculum also showed that this was not to be a narrowly military institution. The range of courses to be on offer—the syllabus included anatomy, chemistry, legal medicine, and hygiene—was very much in keeping with the earlier programme sketched out by Vicq d'Azyr—whose colleague in the Royal Society of Medicine Fourcroy once had been. Crucially, training comprehended both physic and surgery: the unification of the age-old foes was thus

[118] Ibid. 192. For the extension of the medicable, see above, Ch. 7, Sect. D. Specifically on the lunatic asylum, which lack of space obliges us to do no more than mention, see the classic Foucault, *Folie et déraison*.

[119] *Rapport et projet de décret sur l'établissement d'une école centrale de santé à Paris* (Paris, Year III [= 1794]). Cf. A. Prévost, *Les Études médicales sous le Directoire et le Consulat* (Paris, 1907).

[120] It was only under Napoleon that they became faculties of medicine.

sealed. Importantly too the training was to be centred on teaching at the hospital bed rather than at the foot of the professorial lectern. There was a stronger emphasis too on making these training hospitals research centres as well: 'read little, see much, do much' was Fourcroy's slogan for the schools' pupils. The clinical chairs in the Paris school were awarded to the two most important pioneers in this area. *Clinique interne* went to the Paris Faculty physician Jean-Nicolas Corvisart who had trained under Antoine Petit and Desbois de Rochefort, and who had been running a private clinical course at the Paris Charité hospital prior to the Revolution. *Clinique externe* was awarded to Pierre-Joseph Desault, the famous surgeon of the Paris Hôtel-Dieu. These men were instrumental in ensuring the institution's effectiveness and fame.[121]

The establishment of the *écoles de santé* did not entail the abandonment of the free field in medical practice. Indeed it was not till 1798 that the schools even issued certificates. It was thus still possible for anyone who could afford the *patente* to practise unmolested as an *officier de santé*. But the legislation did bid fair to send out both to the army and ultimately to the wider society a new, improved type of physician who would raise the standards of public health and, it was hoped, the level of public expectation in the health services they received. Though the subcommittee for which Fourcroy had reported had been set up when Robespierre was still at the helm, the report also marked a first and important step away from some of the premisses of 'Jacobin medicine'. In particular, it highlighted the priority of *savoir* over civic commitment, technical expertise over patriotism in the training and practice of the *citoyen-savant*. Medicine was still to be public, accessible, pragmatic, and preferably patriotically self-sacrificing. Medical practitioners were not to lose sight of the exigencies of the new Republic: indeed, the patriotic circumstances in which a new kind of professional medical identity had been forged in Year II were to be a crucial determinant in the re-formation of the medical system. Even so, the medical professor had now definitively discarded *sans-culotte* garb for the ceremonial robe of the teacher and the scientist.[122]

A notable indicator of change was the gradual reconstitution of the informal community of scientists. Critical here was the emergence of informal agencies of scientific sociability from the Directory onwards, which formed part of the more general process in which, following the period of Terror which had blurred divisions between private and public spheres, the bourgeois public sphere re-emerged. Salons reopened: those presided over by Mesdames Helvétius and Condorcet became storm-centres for the scientific intellectuals known as the

[121] Gelfand, *Professionalizing Modern Medicine*, 165 ff. is especially good on this early period of the school's existence.

[122] On this process, see esp. Dhombres, *Naissance d'un nouveau pouvoir*.

Idéologues (Cabanis, Destutt de Tracy, Daunou, etc.).[123] Coffee-houses revived. Freemasonry resumed again: the Grand Orient reconstituted itself in 1796. In Paris, a Société de Santé began meeting in the same year, and a Société médicale d'émulation shortly afterwards. Communication and exchange of medical views, experiments and discoveries were the aim of such bodies, which spread widely within the provinces.[124] The scientific press revived too, following doldrum years during the Terror. Scientific titles between 1798 and 1814 represented some 14.3 per cent of total production—markedly higher than pre-Revolutionary level, and if the years 1798 to 1800 are at all typical, nearly 40 per cent of these were medical titles.[125]

Medicine was moreover developing into a position in which it could claim scientific status. Medicine's scientificity had been sorely contested in the last years of the Ancien Régime, when even the most avowedly neutral and supra-political agencies of medicine seemed to be immired in a quagmire of privilege and corruption. The close association of medicine and science with the post-Revolutionary state and the ambience of patriotism which clung to it helped cleanse these stains. Medicine undoubtedly benefited too from the revival of the other sciences from the late 1790s, which was aided by the political drift towards the centre in the period of the Directory (1795–9)—a drift which would be given a more authoritarian stiffening by the advent to power of Napoleon Bonaparte in the Consulate (1799–1804) and First Empire (1804–15). One consequence of this was the broadening of the range of republican scientific institutions. Though they too were conceived as being quite as committed to utilitarian, patriotic values, they, like medicine, now had less of a democratic, 'Jacobin', or '*sans-culotte*' edge to them. All were attempts to institutionalize and, to a certain extent, to professionalize and to give more rational pedagogic form to the practically oriented science deemed worthy of the post-Revolutionary state. From the Terror, the old Jardin du Roi emerged reclothed as the Muséum d'histoire naturelle and the Collège Royal as the Collège de France; the École des Mines and the École des Ponts et Chaussées were revived; and an Arts and Crafts Conservatory (Conservatoire des arts et métiers) and a new engineering school, soon to become the École Polytechnique, were created.

[123] For the Idéologues, see S. Moravia, *Il pensiero degli Idéologues* (Florence, 1974); J. Larrain, *The Concept of Idéologie* (London, 1979); and F. Azouvi (ed.), *L'Institution de la Raison: La Révolution culturelle des Idéologues* (Paris, 1992).

[124] Foucault, *Birth of the Clinic*, 73 ff.; Ramsey, *Professional and Popular Medicine*, 106 f.; R. Fox, 'The Savant Confronts his Peers: Scientific Societies in France, 1815–1914', in id., *The Culture of Science in France, 1700–1900* (Aldershot, 1992).

[125] J. Dhombres, 'Books: Reshaping Science', in R. Darnton and D. Roche (eds.), *Revolution in Print: The Press in France, 1775–1800* (Berkeley & Los Angeles, 1989), 177 ff. Cf. figures, and the general line of argument, in Hesse, *Publishing and Cultural Politics*, esp. 259.

Capping them all in 1795 came the Institut ('National Institute of Arts and Sciences'), a clear-cut attempt to link up with the ethos of Enlightenment science, dominated as it was by the Idéologues, with Cabanis in particular to the fore.[126] Physicians played a prominent role in the First Class of the Institute devoted to science (the Second Class concerned moral and political sciences; the Third, literature and fine art). Indeed the First Class was in some ways a resuscitation of the old Academy of Sciences, and had strong continuities at the level of personnel. As with the Academy, moreover, established medical figures were very much to the fore: the section devoted to medicine and surgery contained the ex-court physician Antoine Portal and Jean-Charles Desessartz, the former dean of the Paris Medical Faculty, while medical men were also to be found in a number of other locations, such as anatomy and zoology (Tenon, Pierre-Marie-Auguste Broussonet (1761–1807), Cuvier (1769–1832)), botany (Antoine-Laurent de Jussieu), and chemistry (Fourcroy, Chaptal).[127]

Historians Jean and Nicole Dhombres see the late 1790s as crucial years in the period from the 1770s to the 1820s which saw the constitution of a strong scientific community: they estimate a twofold increase in the number of practising scientists in the long term.[128] The importance of these years did not derive from a numerical breakthrough: the offshoots of the new scientific and medical institutions were not yet present in any numbers; and the numbers of physicians and surgeons in Paris had dwindled to around one-half and two-thirds respectively of their pre-Revolutionary levels.[129] Critical, however, was the bureaucratization of science which took place in these years. The system was still massively riven with patronage and informal clientage networks, but science from now onwards played a far more central and instrumental role for governments than it had done under the Ancien Régime, when scientific institutions had a corporative form which made them as proudly autonomous as they claimed to be loyally obedient to their monarch. The Institut acted as a government agency for scientific consultancy, with members receiving a salary, and the new institutions all combined teaching and research, thus making scientific careers more possible.[130] The incidentals of that bureaucratization are also worthy of note: science had a strongly anticlerical, republican tinge. Even more fundamentally, it excluded women utterly and completely. Radical, atheistic scientists found it easier to work with a clericalist aristocrat than a republican woman. To break out

[126] On this figure, see esp. M. Staum, *Cabanis: Enlightenment and Medical Philosophy in the French Revolution* (Princeton, 1980).

[127] Ibid. 813 ff. (annexe 1), for a listing.

[128] *Naissance d'un nouveau pouvoir*, 170 f.

[129] Sournia, *Médecine révolutionnaire*, 203.

[130] J. Ben-David, 'The Rise and Decline of France as a Scientific Centre', *Minerva*, 8 (1970), 160–79, should be read alongside R. Fox, 'Scientific Enterprise and the Patronage of Research in France, 1800–1870', *Minerva*, 11 (1973), 442–73, and D. Outram, 'Politics and Vocation: French Science, 1793–1830', *British Journal for the History of Science*, 13 (1980), 27–43.

of the newly-reconstituting medical penumbra and into the academy of learning, women in the nineteenth century would need to penetrate the barriers of public service and university teaching.[131]

The symbiotic links which science and medicine now maintained with the post-Revolutionary state encouraged, surprisingly enough, when one recalls the almost universal distaste for corporative approaches in 1789, a kind of neo-corporatism to develop. The prizing of expertise and formal learning procedures after the Jacobin moment in which patriotic commitment was be-all and end-all allowed a closer, more critical gaze to be given the free field for the practice of medicine which had been in place since the early days of the Revolution. The establishment of the *écoles de santé* had been predicated upon the assumption that good practitioners put into circulation by the 1794 law would drive out the bad, a kind of inverted Gresham's Law. This simply did not happen. And public life in the late 1790s would resound to fears about the disastrous impact that charlatans were wreaking on the nation's health.

The late 1790s saw some of these battles being fought out in a complex and subtle war of manœuvre within the political sphere.[132] Physician-deputies in the Directorial Council of the Five Hundred—the main legislative chamber—composed a parliamentary lobby which helped put health and medical matters high on the institutional agenda. But that lobby was itself split. The experience of the Terror had deterred this grouping from embracing the radical patriotic agenda for medical organization sketched out in the aftermath of mesmerism in the last years of the Ancien Régime. Neither did the free field in medical practice opened up since 1790–1 seem to offer enough social and personal protection to allow the commercializing option much unqualified support. But the old statist agenda based on the idea of bureaucratizing medical practice also seemed problematic in regard to the liberal values holding sway. Curiously, then—and from the vantage-point of 1789 utterly unpredictably—the corporatist agenda for change came back into fashion among the recharged medical élites. Some form of corporatism—for medicine, as for law and other emergent professions[133]—seemed to be the best defence against the excess of the unregulated market-place, while also holding out guarantees against an overly centralized state (on either the Bourbon or the Robespierrist model) or an overly radical social philosophy.

No one, seemingly, wanted to return to the pre-1789 situation, when the very legitimacy of medical organization and science had seemed under threat. In any case, archaic corporatism had no place in a public law based on the Rights of

[131] Dhombres, *Naissance d'un nouveau pouvoir*, 200 ff.

[132] On these manœuvres, and the legislative and political background to the law of Ventôse, see esp. Foucault, *Birth of the Clinic*, 72 ff.; and Ramsey, *Professional and Popular Medicine*, 75 ff.

[133] For the law, see I. Woloch, *The New Régime: Transformations of the French Civic Order, 1780–1820s* (New York, 1994), esp. ch. 11.

Man. The medical lobby, and medical pamphleteers, were divided on exactly how neo-corporatist logic could be grafted onto the very changed field of medical practice brought about by the Revolutionary experience. Could the values of liberal idealism and market competition somehow be matched with the exigencies of professional competence and the protection of the nation's health? Some individuals like Fourcroy, and to a lesser extent Cabanis and Thouret, tried to stress the predominance of Parisian interests. Most of the other physicians in the legislature, in this most decentralized and decentralizing eras in French parliamentary history, resented Parisian dominance. These second-rank figures—men like Jean-François Baraillon (1743–1816), Guillaume-Charles Porcher (1752–?1824), Jean-Marie Calès (1757–1834), and Louis Vitet (1736–1808)—fought out their campaign in the subcommittees of the legislature, urging greater powers to be dispersed among the provinces. Although the unification of medicine and surgery from 1794 seemed largely uncontested at the upper echelons, many such physicians still bristled with resentment at being unceremoniously bundled together with every petty army surgeon or travelling dentist who could make some claims on serving the nation's health. Though Cabanis in particular fought a rearguard action on this, most physicians by the late 1790s were coming around to believing that some form of organizational hierarchy would have to go hand in hand with the recorporatization of medicine.

The advent of Napoleon in 1799 made the likelihood of a firm resolution on these matters greater. Fourcroy's support for the First Consul made him still a key player, while the appointment of the Montpellier chemist and physician Chaptal to the ministry of the interior placed him too at the centre of the action. Even so, a great deal of effort was expended before a workable new regulation for the practice of medicine was agreed. The law of 19 Ventôse Year XI (10 March 1803) which ensued established a new system of certification for the practice of medicine, and its impact was heightened by important ancillary measures, notably a law on pharmacy on 21 Germinal (11 April 1803). Secret remedies were also regulated by a further law on 25 Prairial Year XIII (14 June 1805). (Amended in 1810, legislation was less successful in establishing definitive solutions in this sphere.)[134]

This legislation resisted the centralization of education on Paris by reaffirming the continued role of three medical schools rather than one in Paris, and endorsed the unification of medicine and surgery which had become the norm since the establishment of the *écoles de santé* in 1794. Doctors of medicine and doctors of surgery were still to exist separately, but to have a common training in one of the health schools, differentiated only by certain curricular differences. Both path-

[134] M. Ramsey, 'Academic Medicine and Medical Industrialism: The Regulation of Secret Remedies in Nineteenth-Century France', in A. La Berge and M. Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Amsterdam, 1994).

ways to qualification involved examination, and individuals were to receive the right to practise throughout France on exactly the same basis. The localism, as well as the disciplinary separation, which had characterized the Ancien Régime was thus broken, though only on this level. The law made a ruling of major importance by distinguishing between doctors on one level and, below them, health officers (*officiers de santé*). The latter constituted a low-level general practitioner in some respects similar to rural surgeons under the Ancien Régime. In the case of the *officier de santé*, a number of practical pathways to qualification were laid out: six years' service under a doctor for example or five with a surgeon. Individuals were examined and received a licence to practice from a medical jury (*juri médical*) at the level of the department composed of local doctors. Their rights to engage in more complex medicine and surgery was strictly limited, and they were restricted to practice within the department of reception. The Ventôse law also regulated the examination of midwives on much the same lines—this branch of practice was definitively brought under the control of the doctors who sat on the departmental medical juries. Regulations relating to pharmacy kept a separate identity for this branch of the healing art. It too, however, established a two-tiered system as in the world of medicine: élite pharmacists trained in the three national *écoles de pharmacie* distinguished themselves from their second-level colleagues, who were received under a departmental jury system.

Overall, the new system constituted a nationwide and rationally ordered system of health care, which established in theory at least a relatively clear line of segregation from the medical penumbra.[135] That system bore traces of the great debates on medical institutions current in the late 1780s and early Revolution, as well as the scars of the 1790s, when the principles at issue had been variously and assortedly implemented, with greater or lesser success. The liberal values implicit in Revolutionary political culture were fundamentally endorsed: the right of physicians to practise freely, and for patients to choose their doctors freely were uncontested. The 'free field' in medical practice established after 1789 had, however, been reined in by the newly discovered respect for medical expertise, which the Ventôse law regulated and endorsed. Patriotism, or any other political or ideological value, was regarded as no longer being enough of a basis for national health care. The more radical statist options evident on some parts of the medical agenda in 1789 were shelved: there was little thought now of making salaried physicians part of a national health service as under the provisions of Year II. State-led ambitions for root-and-branch reform of social welfare had been muzzled, and indeed medicine's role in post-Revolutionary poor laws was exiguous. The upshot was the establishment of a new legal and regulatory architecture for

[135] At least in theory: for problems in implementing the legislation as regards medical irregulars, see esp. Ramsey, *Professional and Popular Medicine*, esp. ch. 2.

the practice of medicine in the nineteenth century: a regulated, neo-corporatist medical system in which, in its dual respect for both freedom to practice and respect for expertise, we may be justified in recognizing a profession.[136]

E. The Myth of Medical Progress

The nascent professionalization of medicine in the Revolutionary and Napoleonic era, the closer links with other sciences, and the emergence of a scientific community where physicians rubbed shoulders with scientists would have cut little social and cultural ice with a liberal-minded élite had not the newly established *écoles de santé* turned the discipline into a fully fledged empirical science. As we have seen in earlier chapters, physicians in the last decades of the Ancien Régime had been quick to come out in favour of a new medical science shorn of the rationalist hypothesizing of traditional Galenic and Cartesian medicine, but they had found it impossible to delineate a set of commonly agreed experiential practices. The new medical science on the eve of the Revolution had no solid methodological underpinning which would ensure that the public could not conflate the learned physician with the footloose empiric.[137] At the turn of the nineteenth century, however, medical science came of age. A group of physician-professors working in Paris and using similar anatomo-clinical techniques based on the hospital developed a vibrant medical research school, whose results in the field of pathology were so impressive that their collective investigative practices were soon adopted throughout the Continent as the touchstone of a new medical science.

The founder of the Paris School is usually held to be Marie-François-Xavier Bichat (1771–1802) who, paradoxically, was neither a public professor nor an academically trained physician. Because of the upheavals of the Revolutionary decade, he had gained his knowledge in the art studying in hospitals, notably at the Paris Hôtel-Dieu under Desault. Paradoxically too he was not a pathologist but a vitalist physiologist who dedicated his short life to uncovering the basic building blocks of animal life at the suborganic level. His legacy lay in his passionate commitment to careful and endlessly repeated dissections. Bichat turned French anatomy into a science rather than a piece of casual theatre: in the last year of his life he was said to have opened up 600 cadavers.[138] His admirers and succes-

[136] For scholarship on the professions, see the titles listed above, at nn. 73 and 74. Goldstein, *Console and Classify*, ch. 1 is esp. good on these developments. She argues that the neocorporatist element in the new profession was comparatively weak, and that the collective service ideal of doctors was not properly developed until much later in the nineteenth century.

[137] See esp. above, Ch. 11, Sect. A.

[138] E. Haigh, *Xavier Bichat and the Medical Theory of the Eighteenth Century* (*Medical History*, suppl. no. 4; London, 1984), chs. 5–8; Lesch, *Science and Medicine in France*, esp. ch. 3.

sors took advantage of their position as hospital doctors in the capital to combine Bichat's anatomical method with the detailed hospital-based study of particular maladies: Corvisart, for example, worked on heart disease, Jean-Louis Alibert (1766–1837) on dermatology, and Gaspard-Laurent Bayle (1774–1817) on phthisis. As a result, French pathological anatomy ceased to be a random and casual study, where conclusions were drawn on the basis of the odd dissection. Instead, it became indissolubly linked to a close and comparative scrutiny of the internal lesions of hundreds of patients suffering from the same disease and whose individual experience of that disease had been equally closely charted and compared.

The essence of the Paris School is not always easy to grasp. Foucault highlighted the novel form of *regard*, or gaze, as its key ingredient. He admitted that a quasi-science of pathological anatomy existed from the time of Morgagni, but argued that its earlier practitioners had merely demonstrated through autopsy what was already known: the study was didactic rather than creative. It placed too little emphasis, moreover, on the individuality of the disease, whereas the Paris professors at the turn of the century were not anatomical nosologists but historical archaeologists, part of the wider Romantic *episteme* which Foucault identified in which emphasis was placed on the uniqueness of events. Writing around the same time as Foucault, E. Ackerknecht saw the originality of the School as its uncompromising use of the hospital as the institutional base of medical research, and in its elaboration for the first time of what has come to be known as clinical method: the selection, isolation, and scrutiny of the history of statistically significant numbers of patients with the same disease. Indeed according to Ackerknecht, so besotted were the Paris professors by clinical method that they turned their backs on other sciences, notably chemistry, which could have helped their study of pathology, with the result that the torch of medical investigation was after 1830 passed to the Germans.[139]

More recent accounts have nuanced these accounts in important ways. Paris was not the first medical centre to develop a creative pathological anatomy: the honour could equally be claimed by London or Vienna.[140] Equally, Paris professors did not reject other sciences or the investigative techniques below the level of the gaze: the School had its microscopists in the 1830s.[141] We hope to have established in this volume the presence of creative rather than didactic approaches in pre-Revolutionary hospitals. Care must also be taken not to make

[139] Foucault, *Birth of the Clinic*; Ackerknecht, *Medicine at the Paris Hospital*.

[140] See esp. O. Keel, 'The Politics of Health and the Institutionalization of Clinical Practices in Europe in the Second Half of the Eighteenth Century', in W. F. Bynum and R. S. Porter (eds.), *William Hunter and the Eighteenth-Century Medical World* (Cambridge, 1985).

[141] See A. La Berge, 'Medical Microscopy in Paris, 1830–1855', in id. and Feingold (eds.), *French Medical Culture*. See also C. Hannaway and A. La Berge (eds.), *The Paris School Revisited* (forthcoming).

the professors too homogeneous a group, for the second generation was bitterly divided ideologically: the Catholic royalist René-Théophile-Hyacinthe Laënnec (1781–1826) was poles apart from the materialist François Broussais (1772–1838). To some degree at least, the Paris School was less a reality than an ideal created by outsiders to push governments into the medical reform of their own faculties. At the very least, the image of the professional physician fully in charge of his patients' bodies was a hospital construct. When Laënnec turned his attention to his private patients, he was forced to become again the deferential and accommodating consultant of the pre-Revolutionary medical world, chosen as much for his religion as for his medical skill.[142]

There is no denying, however, the importance of the Paris School in the Europe-wide struggle to create an empirical medical science. Post-Revolutionary Paris was equipped with a particularly large number of hospitals which, thanks to the Revolution, could be developed as sites for medical research in an unprecedented way: patients were many, the physicians were now in control, and bodies were plentiful.[143] The Paris professors were able to work out and carry through a research strategy which turned the hospital into a veritable laboratory. Moreover they pioneered new investigative techniques which revolutionized the concept of medical observation. Before, observation was a visual act. The Paris School popularized and perfected the audial *regard* by privileging auscultatory investigation in the form of Corvisart's ear-trumpet (first used by Auenbrügger of Vienna) and above all Laënnec's stethoscope. The latter was the first addition to diagnostic technique since the time of the Greeks. Thereby it became possible to sense what was going on inside the body of the patient, and made pathological anatomy a lot more relevant. Moreover, the stethoscope was difficult to use and required training. It confirmed the space between the learned physician and the empiric, for only the physician trained in the hospital to master the new technology could properly diagnose disease. These important institutional and scientific changes gave medical practitioners a strong sense of their scientific credentials. This was ultimately confirmed by the foundation in 1820 of an Academy of Medicine, which bore many of the hallmarks of the old Royal Society of Medicine, in that, notably, it was given a policing role as well as a role in promoting research in medicine and surgery.[144]

The brilliant successes of Parisian hospital medicine should not, however, dazzle us to some of the more mundane realities of medical education on offer

[142] J. Duffin, 'Private Practice and Public Research: The Patients of R. T. H. Laënnec', in La Berge and Feingold (eds.), *French Medical Culture*.

[143] Weiner, *Citizen-Patient*, pt. iii.

[144] See G. Weisz, *The Medical Mandarins: The French Academy of Medicine in the Nineteenth and Twentieth Centuries* (forthcoming).

from the late 1790s.[145] The new medical course was certainly superior to the traditional faculty curriculum. It gave much more space to providing a solid grounding in the ancillary medical sciences of anatomy, botany, chemistry, and even physics. More importantly, it stressed the need for students to receive a thorough grounding in practical patient care. The School had three professors of clinical medicine, whose termly hospital-based courses were supposed to be followed by students over a three-year period: the first introduced students to physical cases, the second to surgical, and the third to peculiar and unusual conditions. Generally, moreover, the professors lectured in a more accessible and interesting way, speaking in French and using visual aids. When Alphonse Le Roy (d. 1816) lectured on the physiological foundations of a healthy mind and body in 1800, he illustrated his lectures, Hamlet-like, by referring to five human skulls placed before him.[146]

The Paris École promised, however, more than it delivered in the first two decades of its history. Despite the new emphasis on practical medicine, students still had limited access to patients. Vicq d'Azyr had imagined that students would mix with patients all of the time. In fact, hospital and faculty remained separate rather than conjoined, and most students spent most of their time on theoretical medicine. Even when they attended the clinical courses, they did not have the opportunity to anatomize personally or look after the patients themselves. Indeed there were soon so many students attending these courses—the School enrolled 1,000 students in 1800 and 2,000 in 1820—that those who walked the wards could seldom see or hear the professor. Students wanting real hands-on experience had to attend private courses, just as before the Revolution.[147] Admittedly 1797 had seen the opening of the École pratique de dissection, heir to the École pratique formerly run by the surgical school, but this offered only forty places a year.[148] Little wonder, then, that the pre-Revolutionary physician reformer Chambon de Montaux despaired of the new school and saw it as a betrayal of the *Nouveau Plan* of Vicq, rather than its fulfilment.[149]

[145] See L. W. B. Brockliss, 'L'Enseignement médical et la Révolution: Essai de réévaluation', *Histoire de l'Éducation*, 42 (1989), 79–110; and id., 'Before the Clinic: French Medical Teaching in the Eighteenth Century', in Hannaway and La Berge (eds.), *Paris School*. For a more positive account, see R. Rey, 'L'École de santé de Paris sous la Révolution: Transformations et innovations', *Histoire de l'Éducation*, 57 (1993), 23–57.

[146] BM Avignon MS 1269, pp. 127–8 (Amoreux's autobiography).

[147] Cf. the experiences of François-Louis Poumiès de la Siboutie, in his *Mémoires* (Paris, 1870), 81 ff. Poumiès de la Siboutie was in Paris from 1810.

[148] M. J. Imbault-Huart, *L'École pratique de dissection ou l'influence du concept de médecine pratique et de médecine d'observation dans l'enseignement médico-chirurgical au XVIIIe siècle et au début du XIXe siècle* (Lille, 1975), 182 ff.

[149] 'Projet de réforme dans l'enseignement de la médecine' (Mar. 1815), contained with other reform projects in BFMP MS 5143.

Vicq's *Nouveau Plan* was betrayed in other ways too. He had intended the students to be examined in completely new ways. The traditional public orals, which he despised as exercises in rhetoric, were to be replaced by written examinations and practicals.[150] In the event, this never happened and the 1803 regulations emphasized once more the viva, backed up by a written dissertation in Latin.[151] So many students had to be processed that the examinations became necessarily perfunctory and critics complained that candidates rejected at Montpellier and Strasburg were frequently accepted in the capital.[152] Early nineteenth-century Paris became a degree factory. The degrees awarded were primarily in physic too: only 72 of the 2,153 doctorates awarded between 1803 and 1815 were in surgery. There was less equality between the old two branches of medicine than had been the reformers' hope. By 1815 leading surgeons were expressing concern that surgical expertise would soon be in short supply. They decried the level of surgical education, bemoaned the lack of instruction in midwifery, and urged that the two careers of physic and surgery be separated once more.[153] Vicq's dream, then, of a medical school which would produce hospital-trained, assiduously examined general practitioners was still far from realization.

Medical science might have established its credentials, but most graduate physicians were still pretty wet behind the ears when they emerged from medical school. Despite the creation of a medical culture which aimed to exclude the empiric, the latter could still claim that learned and unlearned practitioners ultimately acquired the basics of their craft in much the same way, out in the field. The early nineteenth century was to see the continuation of the conflict between physicians and those they still bitterly accused of charlatanism. Indeed, the 1803 Ventôse law which had sought to draw a hard and uncrossable line between the core of the new medical community and the penumbra frequently operated at local level in such a way as to allow a place on the departmental rolls of *officiers de santé* to individuals with only the scantiest of medical qualifications, often picked up in the regulative chaos of the Revolutionary decade.[154] An active medical core and penumbra crowded the medical market-place and reduced income levels throughout. The early nineteenth-century practitioner

[150] Vicq d'Azyr, 'Nouveau Plan de constitution pour la médecine en France', *Histoire et Mémoires de la Société Royale de Médecine: Années 1787–1788*, 9 (1790), 45 ff.

[151] Clauses 6–8, in *Recueil de lois et règlemens concernant l'instruction publique, dépuis l'édit de Henri IV en 1598 jusqu'à ce jour* (8 vols.; Paris, 1814–28), ii. 335.

[152] Chambon, 'Projet', fos. 8–10.

[153] e.g. Jean-Charles-Félix Caron, *Démonstration rigoureuse du peu d'utilité de l'École de Médecine* (Paris, 1818) and M. Léveillé, *Mémoire sur l'état actuel de l'enseignement de la médecine et de la chirurgie en France et sur les modifications dont il est susceptible* (Paris, 1816), 16 ff.

[154] As argued by M. Ramsey, in *Professional and Popular Medicine*, and id., 'Property Rights and the Right to Health'.

was at best, in J. Léonard's estimation, a *demi-notable*, still ensconced among the middling sort and as critical of the social élite as he was contemptuous of the lower orders.[155]

On a related tack, we should not overstate either the impact of the so-called birth of the clinic on health care and hospital provision generally. The clinical medicine being pioneered in Paris was slow to take root in hospitals outside the capital. Even in Montpellier and Strasburg, the homes of the two other *écoles de santé*, there were problems in establishing even the most basic ground rules of clinical instruction.[156] Here as elsewhere the greatest problem was the dual pincer movement operated on hospitals from the Directory and Consulate onwards by local notables, often from the political right, and by nursing sisters. This followed the traumatic events of the 1790s, in which hospital property had been fleetingly nationalized and religious nursing orders dissolved. The denationalization of hospital property in 1795, the reorganization of hospital administration in 1797, the re-encouragement of private charity, the re-emergence of nursing communities (after Thermidor) and their eventual legalization (in 1801) produced a profound sea change in most institutions. Rather than the kind of medicalization of hospital space which was taking place under the noses of government in Paris, most hospitals were characterized after 1800, rather, by a movement of 'rechristianization'. Hospital-based instruction did start to become more widespread under the First Empire, but the old battles of territoriality between nursing sisters and medical men re-emerged. Hospital administrators saw their service as a charitable gesture rather than as a link in a systematic chain of welfare provision, or as an instance of medical power. At Lyons, it was only after the advent of the July Monarchy in 1830 that the political balance moved away from the right, and hospital administrations became less clericalist.[157]

One of the main reasons that hospital administrators gave for resisting clinical incursions was the fear that medical men wanted to turn patients into guinea-pigs. They had a point. Cure was not high up the scientific list of priorities. The new scientific medicine sometimes made some rather grandiloquent claims: Cabanis attempted to educate the public into believing that an empirically based scientific medicine was just around the corner: 'there are', he confidently averred, 'few essentially incurable illnesses'.[158] Yet in practice, the School generally delimited

[155] *Vie quotidienne*, *passim*. On the early 19th cent., Léonard's works may be supplemented by M. Ramsey's *Professional and Popular Medicine*, esp. pt. 2.

[156] For these problems, see Jones, 'Picking up the Pieces', and the overview in id., ' "Professionalizing Modern Medicine" in French Hospitals', *Medical History*, 25 (1981) esp. 348 f.

[157] O. Faure, *Genèse de l'hôpital moderne: Les Hospices civils de Lyon de 1802 à 1845* (Lyons, 1981). Cf. Jones, 'Picking up the Pieces', esp. 84 ff.

[158] Cabanis, 'Du degré de certitude de la médecine' (Year VI [= 1798]), in id., *Œuvres complètes* (5 vols., Paris, 1823), i. 506. See also his *Coup d'œil sur les révolutions et la réforme de la*

itself within a pretty restricted ambit. For Bichat, 'medicine was for a long time rejected from the bosom of the exact sciences. It will have the right to be associated with them at least for the diagnosis of the sick.'[159] Knowledge of sickness was thus the focus of scientific effort—and not cure. Throughout the period of ascendancy of the Paris Medical School—until the middle of the nineteenth century—therapy was the most backward of the medical arts. According to Corvisart 'it is sometimes possible to prevent illness, I think; to cure it, never'. In the spirit of the neo-Hippocratic Enlightenment writers in hygiene, he concluded that the best one could do for one's health was to have 'a severe regimen, light food, no strong alcohol, a little exercise, mental tranquillity, and calmness in the passions'.[160] Corvisart is notorious too for believing that a long life had to be balanced against its quality: he could diagnose heart disease and even suggest how a patient could alter his regimen to alter its effects, but he was not sure that the game was always worth the candle. Bayle was if anything even more sceptical, insisting that his chosen specialism, phthisis, was 'always incurable and deadly', and defining therapeutics not as the art of 'curing diseases, but the art of treating them appropriately'. Five of his seventeen principles of therapeutics emphasized the healing power of nature and several expressed disapproval of the use of medicines.[161]

Medicine had been endeavouring to turn itself into a science from the late 1790s. Though, like science more generally, medicine now distanced itself from the highly politicized and democratized 'Jacobin' forms which had been prevalent under the Terror, a key element of rejigged professional identity was a definite commitment, through dedication to ensuring good health, to the values of utility, patriotism, and above all progress. The scientization of medicine and the politicization of health combined to make of the scientific physician, throughout the nineteenth century and well into the twentieth, a crucial artisan of social progress and humanitarianism.[162] In this context, the extreme expressions of therapeutic pessimism from the mouths of some of the arch-exponents of the Paris School seemed, paradoxically, to mark it out of rather meagre social utility. If faith in medicine's potential contribution to human perfectibility remained as unwaveringly strong as it was unquestioned, this was in the context in which the utilitarian pay-off from medical advance was not much in evidence. Medicine's promissory notes had yet to be cashed.

médecine (Paris, 1804), analysed by L. J. Jordanova, 'Reflections on Medical Reform: Cabanis' *Coup d'Œil*', in R. S. Porter (ed.), *Medicine in the Enlightenment* (Amsterdam, 1995).

[159] Cited in J. Léonard, *Médecine entre les savoirs et les pouvoirs*, 26.

[160] Imbault-Huard, *École pratique*, 155, 168. Cf. Ackerknecht, *Medicine at the Paris Hospital*, ch. 11.

[161] Ackerknecht, *Medicine at the Paris Hospital*, 133.

[162] On this theme, on which the work of Michel Foucault is fundamental, see also Dhombres, *Naissance d'un nouveau pouvoir*, chs. 4, 5; and T. Zeldin, *France, 1848–1945* (2 vols.; Oxford, 1973–7), vol. i, ch. 2.

In the gap between promise and performance floated the social myth of humanitarian, progressive medicine. Scientific medicine's relative lack of practical utility was excused by an unchallengeable belief in future advances. We wish to end this book by simply evoking an early formulation of that progressive myth so important in the nineteenth century; namely, Gros's famous painting of Napoleon among the plague victims at Jaffa in 1799, which was exhibited in the Salon in 1804. A general, though one with a clear political future, Bonaparte had taken with him on the Egyptian campaign of 1798–9 an incredibly impressive scientific team, a 'Commission of the Sciences and the Arts' of some 151 members (ten of whom were physicians, prominent among whom was René Dufriche Desgenettes (1762–1837)). The team was responsible for establishing an 'Egyptian Institute', which undertook an ambitious work of research and publication, the *chef d'œuvre* of which is the monumental *Description d'Egypte* published in tranches between 1808 and 1828.[163] In this mission, science made a fruitful and epic liaison with exploration and colonization, whose importance in regard to western attitudes towards the Orient has been underlined by E. Said.[164]

In spite of this broader significance, the Egyptian campaign was essentially about failure. The French navy and army suffered major defeats, and Napoleon hurried home, leaving much of the French expeditionary force behind him. His army had encountered the bubonic plague at Jaffa—the first direct French contact with the disease since the Marseilles episode of 1720. Gros's complexly textured painting is in some ways a cover-up for the fact that Bonaparte was obliged to leave the plague-afflicted members of his army unprotected as he left for France. Indeed, it was widely claimed that he had ordered remaining French plague sufferers to be poisoned.[165] The painting portrays Bonaparte as his propaganda was depicting him in 1804, as a healer. The healer of the rifts in French post-Revolutionary society is shown, moreover, adopting the classic healing gesture of the Bourbon monarchy he came to replace. Part thaumaturge, he also seems to play the role of Chicoyneau at Marseilles in 1720, touching the bubo to signalize the victory of science over superstition. (And we do indeed know that Bonaparte made great play of entering the plague hospitals and touching the afflicted.) Between the dynastic thaumaturge and the plague victim, moreover, is the figure of the physician: the Montpellier-trained physician Desgenettes, who was alleged to have inoculated himself with the plague to prove its

[163] H. Laurens *et al.*, *L'Expédition d'Egypte, 1798–1801* (Paris, 1989); Dhombres, *Naissance d'un nouveau pouvoir*, ch. 2.

[164] Said, *Orientalism* (New York, 1977).

[165] We draw freely in our analysis on H. Mollaret and J. Brossollet, 'A propos des "Pestiférés de Jaffa" de A. J. Gros', *Koninklijk Museum voor schone Kunsten: Jaarboek 1968* (Antwerp, 1968). (Copy kindly communicated to the authors by Mme Brossollet.)

non-contagiousness, and systematically denied that the epidemic was indeed plague.[166] The scientific, humanitarian physician is thus represented at the heart of the relationship between power and disease. Though the context of the painting was rife with denial—Bonaparte's denial of the poisoning story, Desgenettes's denial of plague—politician and physician assume the posture of conquest over one of the most haunting images of the social imagination of early modern France. On such accommodating myths and contracts was the relationship between power and medicine in the nineteenth century to be based.[167]

ILLUSTRATION 25. Engraving of Gros's *Les Pestiférés de Jaffa* by F. Pigeot, early nineteenth century. A cycle of western medical culture seems to be coming to an end in this depiction of a French ruler—a Bonaparte rather than a Bourbon—touching not a sufferer from the king's evil, but rather a victim of plague, the dominant disease of the social imagination of early modern Europe.

[166] Desgenettes was the author of a *Histoire médicale de l'Armée d'Orient* (Paris, Year X (1802]).

[167] On this general theme, see esp. J. Léonard, *Médecine entre les savoirs et les pouvoirs*.

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Manuscript Sources

In writing this book, the authors have had recourse to a large number of manuscripts contained in archival and library collections in Paris, London, Dublin, Philadelphia, and twenty-six French provincial towns (see above, Introduction, n. 17). In view of the volume of materials consulted, we have not thought it possible to provide a comprehensive listing. A complete source reference is provided in each citation of a manuscript in the notes and since most manuscripts are only cited once, there seemed no need to provide a specific list of these manuscripts here. Our aim in this brief note is merely to provide some flavour of the range of manuscript material consulted.

Particularly useful for tracing the evolution of medical doctrine and for setting printed output in its broader cultural context are the abundant professorial *cahiers* and student notebooks, which are a useful addition and occasional corrective to the information conveyed in printed books and dissertations about the content of the courses of medicine and the ancillary medical sciences given in the faculties, surgical colleges, and private amphitheatres. This collection of sources, which is particularly strong for the eighteenth century, is especially useful when the professors left little printed evidence of their activities. Thus only surviving manuscript courses allow us to capture the flavour of the teaching of France's leading iatromechanist, Pierre Chirac, or his Montpellier successor, the vitalist Paul-Joseph Barthez (e.g. BFMP MS 5103 (Chirac on physiology) and BM Montpellier MS 256 (Barthez on therapeutics)).

An invaluable source for studying the history of corporative medicine in the early modern period are the surviving minute-books of individual medical corporations. Only one covers the whole period: the minute-books of the Paris Faculty/College of Medicine: see BFMP MS 1–24 (the early and last volumes have been published by Wickersheimer, Concasty, and Steinheil: see below, Primary Sources, *sub Commentaires*). For the late seventeenth and eighteenth centuries a number of other minute-books survive, notably for the College of Physicians of Nîmes (BM Nîmes MS 425) and the Corporation of Surgeons of Avignon (BM Avignon MS 2289). The history of the Montpellier apothecaries can be followed from the 1670s thanks to a specially compiled collection of letters and legal documents in AD Hérault 4E1–25.

Manuscript sources have been particularly important for tracing the contours of medical practice on the ground, although little of value survives before 1650. A particularly rich, if relatively rare, source are medical commonplace books and journals, the finest by far being the forty-year series of registers kept by the otherwise unknown Beaune physician, Vivant-Augustin Ganiare, from 1736–77 (BM Dijon MSS 425–32). Their absence can be supplemented by account books (such as that of the Reims male midwife Pierre Robin, 1770–92, in BM Reims MS 1082), the transcripts of consultations by letter (of which the best example are the consultations of the early eighteenth-century Paris physician Étienne-François Geoffroy in BFMP MSS 5241–5), and above

all correspondence between medical men, which is abundant after 1750 (see above all the correspondence of Esprit Calvet of Avignon, especially in BM Avignon MSS 2344–52).

Most of the above sources provide some information about the medical practice of unqualified and unlicensed practitioners, but in the main they illuminate the activities of graduate physicians and élite surgeons. The medical penumbra can frequently be glimpsed, however, in judicial and police archives, and in administrative records. Of the latter, one notes in particular the Intendancy holdings located in Series C of the major departmental archives and the documents in the Archives Nationales relating to court pensions in Series O' (Maison du Roi) and the holdings of the Prévôté de l'Hôtel du Roi (esp. series V3). Of quite outstanding value too for studying medical practice *tout court*—both in the medical core and penumbra—are the 200-plus boxes and volumes of records of the Royal Society of Medicine, founded in 1778, kept today in the Paris Academy of Medicine. Haphazardly arranged and poorly catalogued, the records collected by its secretary, Vicq d'Azyr, are the key to understanding the state of the medical art on the eve of the Revolution.

For the growing institutionalized sector, even more information lies within the extremely rich archives of France's hospitals, the one part of the Ancien Régime medical system which has left a superabundance of material. These records are located variously in national, departmental and municipal archives and within hospitals themselves. Many of these records relate to the extensive property holdings of the hospitals, but of particular use for the present study were series E (registers of deliberations, administrative matters) and G (poor relief). There is much material too on hospital personnel in series F, though less on physicians and surgeons than on nursing sisters. For the latter, the archives of the Daughters of Charity, confiscated at the time of the Revolution, and located in the Archives Nationales (especially at S6160–80) proved invaluable. For military and naval hospitals, series C in the departmental archives offered the most useful materials, though there were also useful holdings in the Archives de la Guerre at Vincennes.

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